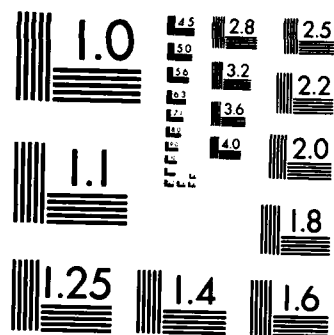AD-A172 830   MANAGING THE NEAR TERM FUNCTIONS OF CHANGE IN MEDICAL   1/2
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MANAGING THE NEAR TERM FUNCTIONS OF CHANGE IN MEDICAL UNITS

A thesis presented to the Faculty of the U.S. Army
Command and General Staff College in partial
fulfillment of the requirements for the
degree

MASTER OF MILITARY ART AND SCIENCE

by

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This thesis attempts to determine the functions of change and the necessary skills required to manage change in medical units. The focus is on the military change agent and his roles within the combat, production, and coordinating/integrating subsystem of the US Army as they related to medical units.

The military change agent is the person or group that is charged with the responsibility to design and implement the change effort. The skills required of this role are introduced and the change process is developed and defined. The thesis explains four management models to explore the complexities involved in change management.

A study of current Army doctrine, procedures, and structures delineate the principles of management that are utilized within the Army System. The Basic Army System Model and the Functional Life Cycle of the Army are explained. Four methods of resolving a perceived

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discrepancy are introduced in the Army management system. They are a change in doctrine, a change in training, a change in organization design, and finally a change in equipment.

The ten functions of change (system, structure, competency, resources, culture, strategy, staff, dissemination, leadership, and advocacy) are examined by the use of a model. The model is applied to three examples of change which have occurred in medical units. Specific examples highlight, amplify, and offer creditability to the model.

This thesis focuses on the functions of change that must be properly managed for the change effort to be successfully managed in medical units. These functions require that the military change agent possess many skills, which include the ability to disseminate information, a recognition and understanding of the unit's culture, the ability to adopt the role of an advocate, and the maintenance of staff continuity throughout the change effort.

MASTER OF MILITARY ART AND SCIENCE

THESIS APPROVAL PAGE

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Philip J. Brookes, Ph.D.

The opinions and conclusions expressed herein are those of the student
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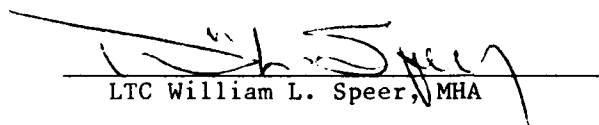(References to this study should include the foregoing statement.)

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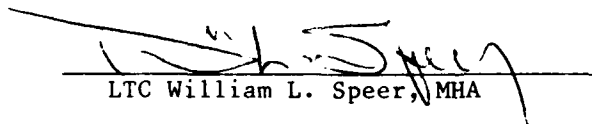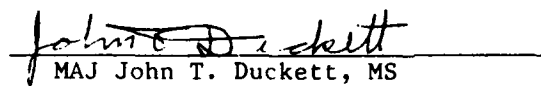
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ABSTRACT

MANAGING THE NEAR TERM FUNCTIONS OF CHANGE IN MEDICAL UNITS by Major
Ray G. Brueland, U.S. Army, 165 pages.

This thesis attempts to determine the functions of change and the
necessary skills required to manage change in medical units. The focus
is on the military change agent and his roles within the combat,
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adopt the role of an advocate, and the maintenance of staff continuity
throughout the change effort.

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To MAJ John T. Duckett, for his expenditure of time and advice. He caused me to think and opened my eyes to how the Army changes.

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And finally to my children for their understanding of all the times that Dad couldn't be there to cheer them on in their own efforts.

"The use of a specific gender in this thesis is for the ease of reading. Whether the masculine or feminine gender is used, neither is intended."

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CHAPTER 1

A round man cannot be expected to fit in a square hole right
away. He must have time to modify his shape.

--Mark Twain, More Tramps Abroad

The Importance of Change Management

With each passing day, technology brings change to our
environment. There is no stopping it. The innovative cycle between a
new idea and its application has been dramatically shortened.[1] If
change is indeed inevitable; how, as an Army, do we best cope with its
effects? Today's Army has never experienced such extensive and
expensive peacetime transitions. The M1 Tank, the Bradley Fighting
Vehicle, the Multiple Launch Rocket System (MLRS), and the Apache Attack
Helicopter are a few examples. Portable X-rays, lighter, mobile
operating room tables, modular health care delivery, advanced drug
therapies, and changing medical treatment protocols are other examples
of technology's impact on medical units operating on the AirLand
battlefield. In a never ending cycle, technology increases the speed of

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1. Alvin Toffler, Future Shock (1970): 27.

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these changes and knowledge increases the speed of the technological

applications. As a result, today systems are developed and fielded

within the Army structure on a continuous basis. It is an absolute

imperative that the Army continue to keep pace with the perceived

threat's application of technology. The rate of change will not slow

and the requirements for change within the Army will increase in the

future. As cited in a recent Army Field Manual (FM), "The science of

war is in a constant state of change, driven by new technological

developments which can radically change the nature of the

battlefield."[2]

History teaches us that the US Army must continue to change.

"It must be prepared to fight the next war, not the last war."[3] As the

US Army improves and changes in order to prepare for the modern

battlefield, the management of these transitions becomes a matter of

concern for every leader. Change should not be viewed solely in its

narrowest sense: as either an alteration of an individual's work

situation or merely a refinement of an existing condition. Change is

the physical and mental process of making something different in some

particular way, either radically in form and composition or in more

subtle ways. Uncontrolled change, whether dramatic or subtle, can lead

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2. US Army, FM 100-1, The Army (14 August 1981): 13.

3. Bob Goodfellow, "The Evolution and Management of Change in Large Organizations", Army Organizational Effectiveness Journal (Vol 9, No 1, 1985): 29 (Cited hereafter as "EMCLO" in AOE Journal).

to chaos, creating more harm than good. Therefore, change within the Army must have focus. It must be directed with some ultimate purpose in mind.

The Army Medical Department (AMEDD) should shape and fashion change to the best overall advantage of the Army, its medical units, and personnel. Medical units, for the purpose of this thesis, are defined as Table of Organization and Equipment (TOE) medical commands above company size that have formal operating staffs (i.e., medical battalions, medical groups, TOE hospitals, etc.). By both mission and design medical units face the challenges of change differently than the Table of Distribution and Allowances (TDA) medical organizations and other non-medical TOE units which they are structured to support.

As with the rest of the Army, medical units are faced with a dynamic increase in the rate of change in doctrine and service support philosophy. Doctrine is the fundamental principles by which the Army guides its actions. It is authoritative in nature but requires judgement in its application. Service support philosophy includes not only the doctrinal "what, how, when, and why" support is provided, but also inter-service, inter-agency, inter-staff agreements and command directives/goals incorporated into accomplishing overall support missions. Together doctrine and service support philosophy provide the framework in which the medical unit accomplishes its tasks.

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As doctrine and philosophy change, medical units must transition from the old to the new. Transition can be defined as the "inner orientation process that individuals and organizations go through when change is introduced into their environment."[4] It is at this point that effective management can make its greatest impact. The transition of units from one state to the other can be accomplished with minimal disruption to the services, provided the change effort is well planned, accepted and forcefully implemented by knowledgeable commanders and staff officers. Well administered successful transitions within AMEDD units will result in the most efficient level of medical support being provided to forces in the field. Therefore, effective change management must enhance and support force modernization policies and procedures within the AMEDD. If AMEDD transitions are poorly managed, men, materiel, money, and time will be wasted. As a result, overall unit efficiency, morale, productivity and perhaps, most of all, readiness of the force will suffer.

"Change is a formidable challenge. It is especially demanding of leaders at all levels because they must facilitate the change process in units throughout the Army while simultaneously maintaining the capability to deploy, fight, and win on short notice."[5] For example the

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4. William Bridges, "How to Manage Organization Transition", _Training, the Magazine of Human Resource Development_ (September 1985): 62.

5. US Army, _FC 100-11, Force Integration Corps/Division_ (July 1985): 1-1.

Medical System Program Review (SPR), Deployable Medical Systems (DEPMEDS), and the flow of many smaller items of supply and equipment down to user units will create major changes in the missions and organization of medical units. These changes must be integrated into units without seriously affecting the readiness of the units. The individual manager, as well as the organization as a whole, must be able to quickly "unfreeze, change, and refreeze"[6] concepts, doctrine and ideas. After all, "Planned change has an obvious advantage: It permits passing beyond reaction to anticipation, thus allowing management to influence directly the course of change."[7]

The management of the change functions is an imperative that is often overlooked in medical units. Within the AMEDD little attention has historically been given to change, its process and the impact that it may have on the unit. In 1984, the fielding of the Medical Equipment Set (MES) Clearing Station caught many of the receiving units unaware, even though the fielding plan was staffed at the Major Army Command (MACOM), corps and division level two years prior to the arrival of the equipment. Virtually all the personnel involved with the staffing action had changed positions. While the fielding plan may have been an acceptable planning document, it had lost visibility. Units were either

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6. Stephen J. Carroll and Henry L. Tosi, Organizational Behavior (1977): 502.

7. Gordon L. Lippitt, Peter Langseth, and Jack Mossop, Implementing Organizational Change (1985): xii.

incapable or unwilling to receive the equipment set and then reconfigure the set for use and storage as indicated in the fielding plan. Furthermore, units were required to make the transition without degradation in their reported readiness posture. Units were simply unprepared for the magnitude of this action. How could this "readiness failure" have been avoided? When were these units supposed to receive information on this organizational change? Who was expected to coordinate this action? Was it effective to field this equipment set without any training or a better understanding of its use? Was it worth the risk to expedite the issue of equipment over the less apparent priorities, including readiness? FM 100-5 stresses, "Training is a full-time job for all commanders in peacetime, and continues in wartime combat zones regardless of other operations or missions."[8] This equipment set was fielded without training, without a clear, well documented plan, and without the prior acceptance of most leaders who received it.

Research Objectives

The research objectives of this thesis are to determine what managerial skills are necessary to successfully handle change in order to avoid problems like the one just described. The techniques necessary

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8. US Army, FM 100-5, Operations (20 August 1982): 1-4.

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to handle the near term functions of change are determined by the management level and the subsystems where the change is to occur. Medical action officers at different levels within the same organization will approach the change effort from different perspectives. However, each of the different levels of management must be concerned with the actions, changes, and procedures of the other levels of management within their organization and their subsystem. The interfaces between subsystems must present information and procedures that can be accomplished as planned. Although the techniques are different, the functions when studied within a particular management level or subsystem are considered to be the same.

This paper attempts to determine within medical units the necessity of the commander/staff officer interfacing with the action officers of the production and integrating/coordinating subsystems of the Army. The interfaces between the subsystems and the functions of change are the targets of this thesis. The commander/staff officer directed to implement change at the medical unit needs to understand the development of the change effort, be receptive to the change, and possess the tools necessary to implement the change.

The action officers in the production subsystem are considered to be the force developer, the materiel developer, the combat developer, and the force integrator. These action officers require a holistic

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perspective in their planning efforts. They must be concerned with their individual subsystem, while emphasizing the importance of the whole system and the interdependence of all its components.

The action officers in the integrating/coordinating subsystem are those action officers of the Office of the Surgeon General (OTSG), or the Department of Army (DA) staff who direct the change and ensure its execution. All of these action officers, although serving within different subsystems and operating from different points of view, require the same holistic approach for change management as their counterparts within the production subsystems.

The phasing and queuing of information is also critical to the proper structural, personnel, and equipment transitions of medical units. The logical queuing of information is absolutely necessary if the transition is to occur without large interruptions of the services provided. It is accomplished by sensible long term planning, the proper utilization of organizational interfaces, and feedback loops. These actions will ensure that change can be both efficiently and effectively directed within Army medical units.

Specific conclusions and recommendations on how to best manage change in medical units are discussed in Chapter 6. This thesis provides an opportunity to explore the complexity of change and its management. A diagnostic model is developed which illustrates a method to determine the functions of change that impact on medical units. Simply stated,

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this thesis seeks to identify what management skills and relationships are necessary to facilitate change with the minimum degradation of readiness and overall mission effectiveness.

Limitations of Research

This investigation is limited to medical units and the interfaces that should exist between the organizations and agencies that produce and effect changes. The Functional Life Cycle of the Army Model serves as the basis of this investigation and Force Integration provides the detailed means by which to examine the specific support systems and their various interactions.

The management of change within medical units is not considered to be entirely different from the management of change in other Army units; however, there are several distinctive characteristics of health care organizations that must be considered. The nature of the task, the nature of the personnel, the unique organizational structures, the constraints placed upon health care delivery, and the basic mission of medical units require complete understanding if change is to be implemented without affecting readiness. Change within medical units should be handled by the most appropriate techniques available, whether it be unique to health care organizations or applicable to all Army units. Like other commands, medical units are subordinate to the Army and as such must act in consonance with it.

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The formulation of doctrine is an iterative process. "Doctrine is an Army's collective vision of how to fight. It must be sufficiently general to apply to a variety of tactical conditions, yet sufficiently precise to ensure common understanding and unity of effort."[9] AMEDD's current doctrinal vision is best summarized in the statement that its purpose is to "maximize the return-to-duty rate to conserve the human component of the combat commander's weapon system."[10] AMEDD's doctrine had not been revised in over 25 years. However, with the publication of FM 8-55 in February 1985 many procedures were updated, revised, and brought in line with contemporary Army doctrine. Changes in doctrinal concepts as a result of the medical SPR will change the types of deployable hospitals, the levels of care, supply responsibilities, and a vast array of other changes that will have dramatic impacts on medical units.

The complementary nature of doctrine, structure, equipment, and the soldiers who employ them cannot be overstated. "Success on the battlefield results from an enlighted amalgam of all four by aggressive, imaginative leadership. Organizational and materiel developments cannot be successfully exploited without a compatible doctrine."[11]

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9. US Army, FC100-11 (July 1985): 1-14.

10. US Army, FM 8-55, Planning for Health Service Support (15 February 1985): 1-5.

11. US Army, FC 100-11 (July 1985): 1-14.

The change process in TDA medical organizations, Army community hospitals, medical centers, research and development activities and schools is addressed only to establish how they should support the overall transition process. Medical protocols and treatment innovations are not discussed. Changing the doctrine, training, structure, internal environment, and equipment utilized in providing medical treatment is the subject, not the medical treatment itself.

Skills of the Military Change Agent

Within the Army there are usually four primary players involved in a change effort: the sponsor, the military change agent, the end user and the using organization. The sponsor is the person or group that approves and provides the resources for the change effort. The end user is the person or group that will use the implemented change effort. The using organization combines the characteristics of both the sponsor and the user. This is usually the end users chain of command and "plays a major role in ensuring that the end user understands the commitment of the sponsor to the project and passing on that commitment as his own."[12]

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12. Raymond J. Zugel "A Management Challenge: The Introduction of Technology Into the Workplace", Army Organizational Effectiveness Journal (Vol 9, No 1, 1985): 48 (Cited hereafter as "A Management Challenge" in AOE Journal).

In the Army, the military change agent is the person or group that is charged with the responsibility to design and implement the project. The military change agent's role is to: understand the desired results of the change effort, use resources effectively, provide feedback to the sponsor, help prepare the end users for the change, build support for the change, get the end user involved in planning the implementation, and resolve the issues created in the change effort. It is important to understand that the players involved in a change effort are not static. As the change moves through the organization so do the roles that the players must assume. The military change agent can be found in all three subsystems as action officers, commanders, and staff officers working on differing stages of the change effort. The players involved will depend on the magnitude of the change and the level of management involved in the change effort as it flows through the organization.

The military change agent needs a variety of tools to judge the trends and processes of change occurring both inside and outside his organization. "He is constantly trying to learn how to solve problems that have not yet occurred but that might someday come up. He is trying to be an expert at managing uncertainity."[13] He must realize that there are two basic categories of change. One basic category of change

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13. Addison C. Bennett, Improving Management Performance in Health Care Institutions (1978): 24 (Cited hereafter as Improving Management Performance).

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is planned change. "It can be defined as a conscious, deliberate, and usually collaborative effort to improve the operations of the system."[14] A second basic category of change is unplanned change. These changes are situations to which the organization must react. The military change agent must realize that a great deal of change takes place as a consequence of evolution or other environmental forces. Unplanned change is reactive in nature and is a response to external stimuli. He must also accept that many changes are generally outside his span of control.

To the AMEDD action officer the support requirements created by AirLand Battle doctrine represent such an evolutionary change. AirLand Battle doctrine emphasizes success on the battlefield centered around four basic tenets: initiative, depth, agility, and synchronization. "The AirLand Battle is an extended, integrated battle."[15] Traditionally, medical units are not designed to demonstrate agility on the battlefield. In fact they often detract from the maneuverability of a supported combat force. The AMEDD action officer at the production and integrating/coordinating subsystem must accept this environmental change. They must re-orient the doctrine, training, structure, and equipment to provide the optimal medical units to the force.

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14. Gordon L. Lippitt, Organization Renewal A Holistic Approach to Organization Development (1982): 52.

15. US Army, FM 8-55 (15 February 1985): 1-1.

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How does the military change agent cope with change? He "must accept that he cannot appropriately or effectively exercise single authority and control over his organization."[16] In doing so he must learn to respond to unplanned changes in the external environment, as well as in the organization itself. The military change agent must be able to systematically manage change and continue to move his organization incrementally toward its predetermined goals regardless of the circumstances. Nevertheless, the military change agent must attend to the things that he can affect and manage the stress caused by the things that he cannot affect. "This can provide a high sense of satisfaction by narrowing the gap between the wish to succeed and the realization of success."[17]

The commander/staff officer needs to feel in control of events within his unit. The loss of control of events created by the implementation of major change results in a feeling of powerlessness which in turn leads to a need to hold on to old ideas. "Holding on to what we have is accomplished by strong resistance to new ideas proposed by others."[18] Resistance to change should be expected. It is a natural response which is prevented or reduced by an implementing officer having the knowledge and understanding to execute the change.

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16. Bennett, Improving Management Performance (1978): vii.

17. Bennett, Improving Management Performance (1978): 26.

18. Goodfellow, "EMCLO" in AOE Journal (Vol 9, No 1, 1985): 27.

Change also erodes experience. It can make apprentices of craftsmen. "Those previously regarded as highly competent may feel foolish and embarrassed as they make the normal mistakes of a beginner. It is important that management pay attention to individual feelings as change is implemented."[19] By acknowledging the relevance of past strategies, experiences, and procedures, management can gain the acceptance of those who are currently doing the job in order to demonstrate to them how the "status quo" requires change. The directive in which the commander/staff officer conveys the change should include the doctrinal reasons why and the management practices necessary to accomplish the change. Providing the doctrinal reasons for the change will help to convince the implementors that the change is necessary and worthy of the effort to make the transition.

The art of communication is vital to a successful change effort. Planning must consider the method of communicating the impending change. The environment must also be considered while choosing the specific method to disseminate the change. It must be remembered that "communication takes place whether you choose to manage it or not. Good communication happens only if you manage it intelligently, and if you are organized to do so."[20] There are five commonly accepted steps to improving communications: get feedback, set

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19. Goodfellow, "EMCLO" in AOE Journal (Vol 9, No 1, 1985): 28.

20. Bennett, Improving Management Performance (1978): 55.

communication objectives, improve the media, improve individual
communications at all levels, and get more feedback to evaluate
communications. The continuous maintenance of feedback loops is
critical to successful change management.

The importance of persuasive communications in both vertical and
horizontal communications cannot be overstated. Persuasive
communication is the art of convincing someone that actions are true by
means of argument, reasoning, or inducement. The military change agent
must have the ability to articulate clearly the requirements in such a
manner as to convince his leaders, peers, and followers of the change.

Vertical communications flow along traditional command lines of
communications. Communication between the medical brigade commander,
his medical battalion commander and TOE hospital commanders are examples
of vertical communication following the chain of command. Vertical
communication also occurs between the subsystems of the Army, usually in
the form of directives and feedback loops (inspections and after action
reports).

Horizontal communication is the communication between staff
elements, staffs, and other units at the same level of management and/or
subsystem of the Army. Liaison officers, inter staff communications,
action officer coordination, and the exchange of information between
agencies are examples of horizontal communications. This form of
communication is considered to be informal, although it is often very

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powerful. Horizontal communication is necessary to manage change successfully. Different day to day priorities and physical locations between staffs make it difficult to coordinate and effect smooth transitions. Failure of staffs to become involved in the planning often results in serious disconnects between action officers planning the change and staff officers implementing the change.

Summary

"Large and rapid deviations from the status quo are characteristic of our age."[21] Changes are common place within the Army. Leaders are trained to make things happen in organizations, but they often fail to recognize the importance of change. The Army is an action oriented organization in which making things happen is vital to the accomplishment of the change effort. It is envisioned, by the proper management of change functions, medical units can achieve goals with the least utilization of resources and most importantly without a degradation in unit readiness. By not recognizing, considering, and executing the functions of change, undue hardships will be created.

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21. Lippitt, _Implementing Organizational Change_ (1985): 97.

CHAPTER 2

The important point in each instance is that the old
'rationality' is eventually replaced with a new, different, and more
useful one.

--Thomas J. Peters and Robert H. Waterman, Jr., In Search of Excellence

The Change Process

Chapter two reviews published literature on the process of
change, its characteristics, and its management. As previously stated,
change is a process that should be managed to the benefit of the
organization. It is not an easy process to manage, but military change
agents must effect those practices that will provide positive results.
By understanding the various characteristics of change the military
change agent will be able to determine the stage of transition his unit
is in and as a result execute appropriate management principles.

An understanding of the basic steps that an organization
experiences as it adapts with its environment is critical to the full
understanding of the change process. To facilitate comprehension, an
adaptive-coping cycle will be examined in an effort to demonstrate the
basic process that the organization experiences as it adapts to change.

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There are numerous models and strategies that have been developed to manage change within an organization. Four change models are presented for consideration and partial use in medical units. It must be realized that these models are situationally specific and involve large amounts of organizational resources. They are presented to demonstrate the stages, processes, effort, and resources that must go into organizational change. The models represent examples of the applied research on change management and provide the basis for the analysis of the change functions within medical units.

The change process, according to Edgar H. Schein (1961) and Kurt Lewin (1957), involves three basic stages: unfreezing, changing, and refreezing.[1]

The first stage is unfreezing. At this stage management attempts to motivate the individual being changed before the actual change is introduced. Common to this stage is the removal of the social support of the individual for the old behavior and attitudes by insulating him from his habitual social system. Unfreezing is the breaking down of the customs and traditions so that new alternatives are accepted.

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1. Stephen J. Carroll and Henry L. Tosi, Organizational Behavior (1977): 502.

Schein outlines two processes that are effective in change programs. The first is identification. The person identifies with one or more role models in his environment and thus tries to emulate them. The provision of appropriate role models facilitates change. The other effective change process is that of internalization, by which the person discovers for himself that the new behavior or attitude will solve the problem. Identification and internalization are not either/or courses of action, but change is often the result of combining the two.

Force is sometimes discussed as another mechanism for inducing change. Change can occur when an individual is forced by the direct manipulations of rewards and punishments. Behavior is modified when a change agent is present, but is often dropped when supervision is removed. Rather than discuss force as a mechanism of change, it is more appropriate to discuss force as a method of unfreezing.

The process by which the newly acquired behavior comes to be integrated as a specific behavioral response is referred to as refreezing. The newly acquired behavior or attitude must be supported by the organization if it is to become a recurring part of the individual and the system. The effects of many changes are short-lived because the organizational environment does not reinforce the new way or is hostile toward the change. The concern in the refreezing process is that the change does not become extinct over time. Simply stated, reinforcement must be scheduled in an effective way.

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FIGURE 1. STAGES OF CHANGE PROCESS
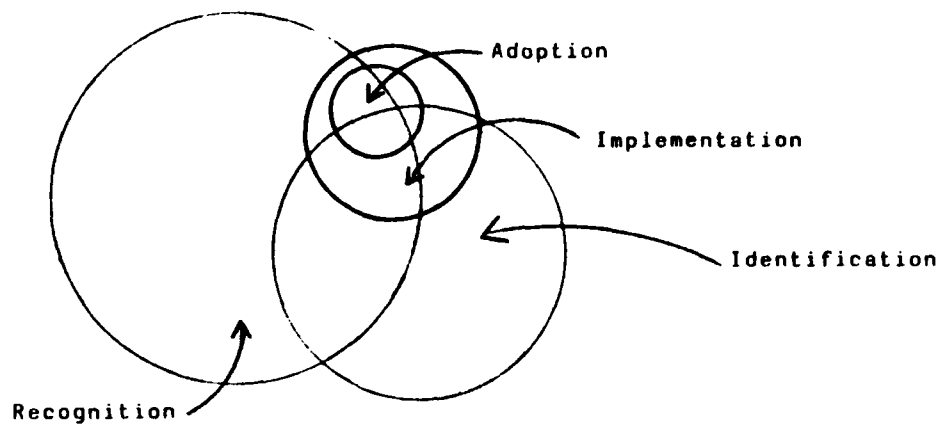
SOURCE. Arnold D. Kaluzny, et al., _Management of Health Services_ (1982): 212.

While recognizing that there is always uncertainty in change, it is undertaken with the philosophy that organizational design can be manipulated to enhance performance. Planned change is concerned primarily with the internal functioning of an organization. These internal functions display certain characteristics that will enable the military change agent to better manage the change effort. The four characteristics of change are: change is a process involving a number of different stages, change is generated from a discrepancy, the implementation of change is not the same as the adoption of the change, and, finally, change is not always a random event.

Change is a process involving a number of different stages. Figure 1 describes the four basic stages in the process. The first

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stage is recognition or diagnosis of a problem by participants "who perceive a gap between what the organization is currently doing and what it should or could be doing."[2] The second phase occurs when the decision makers identify a possible course of action to correct the deficiency that has been recognized. The third stage consists of the implementation of the course of action within the organization. The final stage is the adoption of the change which is the attitudinal and behavioral acceptance of the implemented change effort by the relevant personnel within the organization.

The decreasing size of the circles, representing the various stages, suggests that more problems are recognized than solutions are identified, and more solutions are implemented than are ultimately adopted and accepted. The overlapping but not concentric nature of the circles suggest that the process is not sequential. Identification may occur without recognition; in fact implementation may occur without recognition or identification.

The second characteristic of change is that the "the stimulus for change arises when a discrepancy appears between how the organization is performing versus how relevant actors think the organization should be performing."[3] This discrepancy is a shortfall in

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2. Arnold D. Kaluzny and S. Robert Hernandez "Managing Change in Health Care Organizations," Medical Care Review (Vol 40, Fall 1983): 165 (Cited hereafter as "Managing Change" in Med Care Rev).

3. Kaluzny, "Managing Change" in Med Care Rev (Vol 40, Fall 1983): 166.

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performance of either doctrine, personnel training, organizational

structure, or type of equipment. As a result this discrepancy becomes

the driving force for the change effort.

The third characteristic is that the implementation of change is

not the same as adoption. In many organizations the choice as to

whether the new program or technology is used after the implementation

is secondary. For example, in medical units there is not a consensus on

the best way to establish a field medical treatment facility. There are

guidelines, but often what is utilized is what is understood, not what

is available to the units.

The fourth characteristic of change is that the change process

is not totally random. "There appears to be a predictable order which

administrators need to follow in attempting to implement change

efforts."$^{\underline{4}}$ The introduction of concepts, followed by implementation,

followed by organizational reinforcement is normally how change

eventually becomes accepted. The military change agent must consider

the overall sequence of implementation and acceptance rather than simply

implementing programs without providing appropriate groundwork for the

subsequent implementation.

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4. Kaluzny, "Managing Change" in Med Care Rev (Vol 40, Fall 1983): 167.

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FIGURE 2. THE ADAPTIVE COPING CYCLE
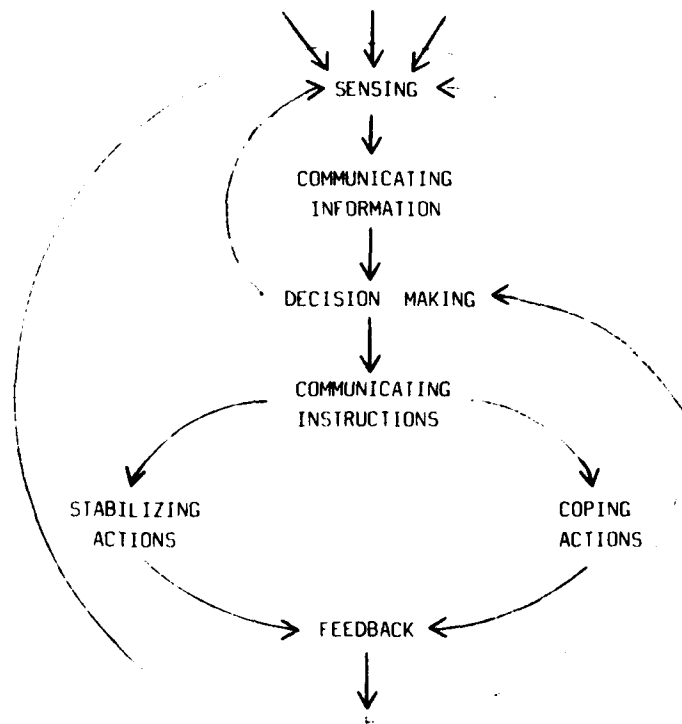
SOURCE. Howard T. Prince, et al., Leadership in Organizations (1 May 1981): 19-8.

The Adaptive-Coping Cycle

A model for the adaptive-coping cycle consists of seven activities which an organization must experience as it adapts to change. The seven activities are: the sensing or recognition of the change, communicating information, decision making practices, communicating instructions, coping actions, stabilizing and integrating the change, and feedback. Figure 2 depicts the relationships of these seven activities.

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The sensing or recognition of the change is the process by which an organization acquires and interprets data about its external and internal environment. Commanders, staff officers, and action officers are constantly searching for information to assist them, give them direction, and confirm their beliefs. Sensing and recognizing a discrepancy is accomplished through the Army's system of Research Development and Acquisition (RDA), the Concept-Based Requirements System (CBRS), and the various Army suggestion programs.

Communicating information is the process of transmitting interpreted data to those parts of the organization that can act upon it. "Individuals act and organizations function on the basis of information that they receive."[5] This represents the information flow from systems of the organization to its leaders. "Organizational structures perform the function of getting information from one person to another or from one group to another."[6] The medical unit's message center, the unit bulletin board, and the chain of command are a few examples of organizational structures used to communicate information in medical units. Communicating information is the necessary horizontal integrating process that must occur for organizations to adapt.

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5. David A. Nadler, Feedback and Organization Development, Using Data Based Methods (1977): 5 (Cited hereafter as Feedback).

6. Nadler, Feedback (1977): 5.

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Decision making is the systematic process which resolves
situations by the analysis of facts and assumptions. In the military
"decision making is both an art and a science."[7] The science is the
knowledge of the rules and procedures for good decision making. The art
is the application and actual performance of decision making. The
decision making process is constrained by the time available, the
urgency of the situation, and the judgment of the decision maker.
Solutions to problems are cyclic and result from a continuous,
interrelated, logical and orderly process. This process consists of
recognizing and defining the problem, gathering information and making
assumptions, developing possible solutions to the problem, analyzing and
comparing the solutions, and finally, selecting the best solution.

Communicating instructions is the process of transmitting both
decisions and decision-related orders and instructions to those parts of
the organization that must implement them. This is vertical
communication within the Army. Nevertheless, communicating implementing
instructions to subordinate units is much more complicated than merely
relaying the information.

Stabilizing actions are intervention strategies taken by action
officers, commanders and staff officers to maintain internal equilibrium
and integration within the organization. These actions are necessary to

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7. US Army, FM 101-5, Staff Organizations and Operations (25 May 1984):
5-1.

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prevent disruption in the achievement of organizational goals. Examples of stabilizing actions are: establishing work standards, role clarification, process consultation, team building, and transition meetings.[8] These strategies, when properly utilized, stabilize the overall organization as it transitions.

Health care services are extremely time-sensitive. The usual decrease in organizational effectiveness during the transition between the outgoing leader and the incoming leader should be prevented. A transition meeting is appropriate when the incoming leader is unknown to subordinates. There is usually little time for the transition, and conditions are exacerbated by differences in leadership styles. Transition meetings, therefore, facilitate the transition. In them subordinate concerns are surfaced early, and the session serves as a team building endeavor.

Coping actions are defined as actions taken in response to the environment as a consequence of an organizational decision. They are the transition of the old feelings and thoughts to the newly conceived but not accepted feelings and thoughts.

Feedback is the process of determining the results of a prior action through further sensing of the external and internal environment. Feedback makes it possible to compare actual with intended

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8. Prince, ed., Leadership in Organizations (1 May 1981): 19-26.

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results and to attempt adjustments where indicated. It is the

information that translates the output of an action into a signal which

may then be used to control the sensing and/or decision making

processes. Potential feedback may exist, but in many cases the

organization may not exercise the option of using the information.

"Feedback enables system correction rather than automatically bringing

it about."[9] Feedback is a necessary component which enables the

correction of errors, the adaptation to environmental change, and

learning. It is most beneficial when it is fast and frequent.

Obviously, the quicker information is available, the easier it is to

stabilize and cope. Rapid feedback simply accelerates the taking of

corrective actions.

The Grid OD Program

The Grid OD Program was developed by Robert S. Blake and Jane S.

Mouton (1969). It is an Organizational Development (OD) program which

systematically attempts to change the culture, systems and behaviors of

an organization in an attempt to improve the organization's overall

effectiveness in solving its problems and achieving its objectives.

This program is resource intensive and logically requires multiple

training sessions. The importance of teamwork, work analysis, and the

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9. Nadler, Feedback (1977): 69.

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development of an ideal strategy is clearly demonstrated by this program. The Grid OD program emphasizes changing the organization in a series of six steps: introducing the managers to the grid program; development of teamwork between the managers, and an analysis of all work; a review of external relationships and the identification of groups needing coordination; development of an ideal strategy; implementation of the ideal strategy; and a critique of the organizational development program.[10]

The development of teamwork and analysis of work is accomplished in the second phase of this model. The analysis of work determines the tasks that the team must accomplish. The ultimate goals of team building are to replace outmoded traditions and practices with a sound team culture, set standards of excellence, increase personal objectivity in on-the-job behavior, use critiques for learning, and establish objectives for team and individual achievements.

The goals of developing the ideal strategy are to specify minimum and optimum objectives, describe the nature and character of activities, define the scope and character of the environment, create the structure for organizing and integrating, delineate basic policies and identify development requirements. The development of the ideal

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10. Robert S. Blake and Jane S. Mouton, "A 9,9 Approach for Increasing Organizational Productivity" in Edgar H. Schein and Warren G. Bennis, Personal and Organizational Change Through Group Methods (1965): 169-183.

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strategic organization model "enables the top team to apply vigorous

business logic in designing and blueprinting what the organization is

expected to become."[11]   It is a technique that moves an organization out

of its traditional way of operating.

The House Management Development Model

A Management Development Model was developed by Robert J. House

in 1967. The model is a systematic approach which seeks to specify the

minimum conditions required for successful change efforts. Input

factors in this model are likely to affect the change and the types of

conditions required to achieve a particular developmental objective.

House lists five key input variables which affect the outcome of the

change, four of which represent the context in which the change effort

must operate. The four variables are: the characteristics of the

participants, the organizational culture, the leadership climate, and

the organizational structure.

It is a fact of life that particular types of individuals

predominate different types of organizations. The infantry officer, the

ordnance officer, and the finance officer all have significantly strong

but different attitudinal orientations. Organizational culture is

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11. Robert S. Blake and Jane S. Mouton, The New Managerial Grid (1978):
182.

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defined as the values and norms that exist within the organization. This culture exists because of the ethnic background of the personnel, the social status of the organization, and its structure and environment. Ideally, the content of the change process should be consistent with the culture of the specific organization. The unit's leadership climate logically emerges from the interaction of leaders and subordinates. The congruency of the leader's attitude with the change objectives, therefore, is critical. Personnel in a changing organization require positive reinforcement from their leadership. The leader must provide guidance, counseling, coaching, and performance reviews based on the change objectives. The organizational structure is simply the formal makeup of the organization. It is composed of the goals, policies, and procedures of the organization and is an important limiting factor in any change process. Simply put, the structure provides the environment for the basic unit of work to be accomplished.

The fifth key variable is the development method itself. Different methods are more effective than others, depending on the objective of the change effort. Some off-the-job training methods are the lecture, films, videotapes, programmed instruction, simulations, case studies, committees, role playing, and sensitivity training. Some on-the-job training methods are job rotation, special assignments, delegation, and coaching. These are all examples of teaching techniques and activities which can bring about change successfully.

The objectives of management development represent the changes
desired when change is complete. Objectives will vary. House defines
five minimum conditions which must be present to effect a change: the
knowledge of the change goals, attitude affecting the change goal,
abilities of personnel to effect the change, job performance changes,
and the end operational results.

Management would progress sequentially to move the organization
from the old, through the necessary transitions, to the desired
organizational results. After a person has increased his knowledge, he
can think about what he has learned, reconsider his attitudes and, if
necessary, rationally change them. With newly acquired skills, he
should have assistance from his superiors in the form of stated
objectives and feedback about his performance to reinforce the new
behavior. If such an approach is taken at several points in an
organization, and all the necessary developmental efforts are conducted,
then change can successfully occur.[12]

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12. Allen C. Filley and Robert J. House, Managerial Process and
Organizational Behavior (1969): 421-434.

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Induced Change

A third school of thought is Gene W. Dalton's model of Induced

Change. Table 1 demonstrates the processes of change in this

comprehensive management model. Change is preceded by internal tensions

which seem to produce a receptive environment for change efforts. The

initiative for the change should come from a respected or authoritative

source. This contributes to the change attempt by giving it

credibility. The objectives of change, however, need to be specific.

When specific development goals are known, the strategy can focus on the

techniques most likely to be effective. The breaking off of old social

relationships and establishing new ones facilitates the change.

Individual self-esteem and confidence emerge as the organizational

members feel they are making real progress. Internalization and

ownership of the change are sure signs of individual acceptance. This

model demonstrates that individuals will accept valid changes.

Furthermore, reinforcement from the organization will enable the change

to become permanent. To do so, the structure of the organization must

be congruent with the environmental requirements to enable the personnel

in the organization to be capable of coping with the new state of the

organization.[13]

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13. Carroll, <u>Organizational Behavior</u> (1977): 514-515.

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TABLE 1. DALTON'S CHANGE MODEL

	PHASE 1	PHASE 2	PHASE 3	PHASE 4
Overall pattern of successful change effort	tension experienced within the system (unfreezing)	intervention of prestigious influencing agent	individuals attempt to implement the proposed changes	behavior and attitudes reinforced by achievement, socialization, and internalized values--accompanied by decreasing dependence on influencing agent (refreezing)
Subprocess 1	• • •	generalized objectives established •	growing specificity of objectives--establishment of subgoals	achievement and re-setting of specific objectives.
Subprocess 2	tension within existing social ties • •	prior social ties interrupted or attenuated • •	formation of new alliances and relationships centering around new activities	new social ties reinforced--altered behavior and attitudes •
Subprocess 3	lowered sense of self-esteem • •	esteem building begun on basis of agent's attention and assurance	esteem building--based on task accomplishment •	heightened sense of self-esteem • •
Subprocess 4	• • •	external motive for change (new schema provided)	improvisation and reality-testing •	internalized motive to change •

SOURCE. William F. Glueck, Management (1980): 424.

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Contingency Theory

Contingency theories of management try to select applicable theories, reform ideas and merge them into more rational theories. Numerous combinations and variations of theories have evolved. The eclectic approach utilized by Gordon L. Lippitt, Peter Langseth, and Jack Mossop appears to be a valid approach. Their method was to borrow from each school of thought, contingent on the problem at hand, and to resolve problems without preconceptions as to the methodology to be used. With a "deliberate effort to be multidisciplinary, interdisciplinary, and eclectic"[14] a rational approach can be taken to the change effort.

The eclectic path does not dictate one best path. It borrows from each school of thought so that the change process compliments and broadens the mutual experience. There are occasions when the most simplistic way is the best. It is a blending of applications that is

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14. Gordon L. Lippitt, Peter Langseth, and Jack Mossop, Implementing Organizational Change (1985): xiii.

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normally needed. As Gordon L. Lippitt stated, "There is no one best way to use influence in bringing about change; therefore, the art of adopting an eclectic freedom to a given situation is quite helpful."[15]

The "Seven S Concept"[16] is predicated on the idea of multiplicity of factors (system management, strategy mix, staff work, skills necessary, structure and organization, style of management, and shared values) that influence an organization's ability to both change and dictate the proper mode of such change. This model conveys the concept of variables being related to one another and dependent upon the other variables within its environment. It is an "assertion of the belief that productive organizational change is something more than interactions among structure, objectives, and strategies."[17]

The Seven S Model provides an excellent model to measure one's ability to implement and conduct change. The actions clearly go beyond the structure, the system, and even the personnel. All those variables that management for so long has been dismissing as intractable, irrational, and intuitive can be managed. Clearly the informal

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15. Lippitt, Implementing Organizational Change (1985): xii.

16. Lippitt, Implementing Organizational Change (1985): 78.

17. Lippitt, Implementing Organizational Change (1985): 78.

organization has as much to do with the way things work as the formal

structures and strategies do. "By recognizing that real change in large

institutions is a function of at least seven hunks of complexity,"[18]

one begins to understand the difficulty of changing a large institution

in any fundamental way.

An organization may be affected by many factors simultaneously

and there appears to be no single factor that alone will create an

organizational block. All of the seven variables somehow are

interconnected, and progress with one requires attention to the other

six. None of the seven variables necessarily is more important than any

of the others; thus, if a critical variable should be revealed, it is

made so by a situation. All variables are subject to the internal and

external environment; including economic, political, ecological,

sociological, and psychological influences. The variables also mirror

the current stages of growth of individuals and groups within an

organization in all positions and levels of hierarchy.

Summary

A review of the literature has determined that the strategies

discussed represent an introduction of the accomplished research on

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18. Thomas J. Peters and Robert H. Waterman, In Search of Excellence
(1982): 11.

organizational change. As a result, these strategies--the Grid OD Program, the Management Development Model, the Induced Change Model, and the Seven S Model--have been presented. The change process and an adaptive-coping model were also presented to clarify and enforce the concept that change is, in the final analysis, the transition, adaptation and coping with not only the idea, but the personnel who are involved with it.

Robert S. Blake argued that "Management takes place within a culture of established expectations."[19] Traditions and past practices may control manager actions rather than the requirements of the situation or their personal inclinations. As has been pointed out, to attempt a change process while ignoring the expectations of those who manage the organization will only provoke resistance to change and may eventually cause the change effort to be set aside. After a brief discussion of the methodology of this thesis, the Army's management perspective will be presented as it applies to the management of change.

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19. Blake, The New Managerial Grid (1978): 177.

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CHAPTER 3

There is nothing more difficult to take in hand, more perilous
to conduct, or more uncertain in its success, than to take the lead in
the introduction of a new order of things.

--Niccolo Machiavelle, 1469-1527

Methodology

This descriptive thesis was accomplished in four phases of
inquiry. A survey of the literature for applied research on change
management was conducted. The US Army doctrine and management systems
as they pertain to change management were detailed down to the medical
unit level. Applying the relevant research to the detailed management
practices, a model was developed as a guide for the complexities of
change management. Finally, with the use of the model, current change
management was analyzed and specific recommendations were made.

The survey of literature in chapter two was limited to the
published sources that dealt specifically with change management. A
conscious effort was made to concentrate on the latest (post-1980)
primary sources on this subject. It was believed that the most current
applied research on change management would be of greater value, and

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perhaps provide a new answer to the research objective. This assumption did not prove to be valid. There is a large amount of research on change management being conducted; however, this research appears to provide only situational answers. What worked for General Motors may or may not work for American Hospital Corporation, which may or may not work for the Army generally, and military medical units specifically. The number of models presented was limited in an effort to prevent this paper from becoming a catalog listing of the various models. It was envisioned that the four models would present an introduction of the applied research specifically accomplished on change management.

A study of current Army doctrine, procedures, structure, and organization delineated the principles of management to be utilized in change management within the Army. In the process several questions came to the forefront. For example, does the Army practice sound management techniques when it conducts organizational change? How should changes be managed within the Army? "Doctrine, organizations, people, equipment, and training are inexorably linked in building a combat ready force; however, the management structures and systems that support them are not."[1]

The Army has traditionally fragmented the responsibility for each function within the Army Functional Life Cycle. By this separation

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1. US Army, <u>FC 100-11, Force Integration Corps/Division</u> (July 1985): 3-1.

of building blocks; doctrine, equipment, organizations, health care, personnel, training, etc., the Army has acheived better management of its resources. "While this specialization makes for better management of each element, it does not address the complimentary effect that they have on each other."[2] This represents a system discrepancy because dealing with each element in isolation leads to problems when implementing change. Equipment may be fielded that does not meet the current doctrine, personnel may not be trained on the equipment that is on hand, or equipment and personnel may not fit into the current structure of the organization.

This problem has been recognized in the US Army; however, it is debatable whether it is controllable. There appears to be too many complex variables for commanders, staff officers and action officers to successfully handle change. The definition of success is perhaps one of the more difficult variables within the Army to define. What should the Army be buying? Who is right? Does the Army need the Bradley Fighting Vehicle? Do medical units need radios in all their ambulances? The definition of success is just one of the many variables which impact on the management of change. Because of the multiplicity of this problem, it is necessary to consider the entire system by utilizing a model.

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2. US Army, FC 100-11 (July 1985): 1-11.

"A model attempts to portray something without completely being the thing itself."[3] Models are used to aid understanding of an actual event or possible occurrence. A model might only be a rough approximation of reality. Model building provides a frame of reference for consideration of a problem. A good model will include and highlight those factors most relevant to the problem at hand, and suppress those which are relatively unimportant. "The main purpose of designing a model is to develop a meaningful set of relationships among the model variables and to use these relationships to gain insight into the problem."[4]

The diagnostic model developed in this thesis presents a method of accounting for the functions of change. The ten functions of near term change in medical units are: the systems affecting the change, the organizational structure, the organizational and personnel competency, the availability of necessary resources, the organizational culture, a change strategy, the availability of the staff, the dissemination of information, the appropriate leadership style, and change advocacy. The importance of each function is variable and depends on the situation. This model can be used by commanders, staff officers and action officers to evaluate the ability of medical units to implement and conduct the

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3. US Army, Army Command and Management: Theory and Practice (19 August 1985): 7-5 (Cited hereafter as Army Management).

4. US Army, Army Management (19 August 1985): 7-5.

change effort. The model provides a conceptual view of the organization and assists the leader in determining which functions need attention.

An analysis and comparison of literature, doctrine, and management systems to the medical system program review (SPR), the deployable medical systems (DEPMEDS), and the fielding of the medical equipment set (MES), clearing station was accomplished. These examples of situations requiring change management are used to illustrate the model and its application. This thesis draws from the accomplished research and applies a rational approach to the medical units studied. Situational answers are deliberately avoided and no one best answer can be recommended. The art of effecting change in an organization is described with the intended desire of increasing ones understanding of this complex process.

CHAPTER 4

We are a pragmatic Army. We pride ourselves in our ability to
solve problems, to improvise solutions and to devise new methods..."

--Hube Wass De Czege, "How to Change An Army"

The Army Management System

The US Army is directed to utilize a performance management
approach which will be accomplished through "organizational goals that
flow in an integrated fashion from the top of the organization, through
the chain of command, to all levels."[1] In that the Army is an
integrated entity "its members and component parts must act not only
independently but also interdependently to approach excellence."[2] An
organization is self-sufficient, possessing the essential autonomy and
authority for changing itself. The degree of autonomy is such that

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1. US Army, AR 5-1, The Army Management Philosophy (15 September 1983):
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2. Robert S. Blake and Jane S. Mouton, The New Managerial Grid (1978):
180.

decisions for change are the responsibility of those who lead the operations. The units within the Army that do not constitute such autonomy are work teams, sections, companies, battalions, and divisions the combat subsystem below Corps. All units are subelements embedded in a larger organizational culture. As a result the type or individual unit is "not sufficiently independent either vertically or horizontally to change itself in sufficient ways without active involvement of other units."[3]

This organizational reality requires the military change agent to maintain a systems perspective in that managing a specific system or subsystem involves the application of both systems theory and philosophy. The technique usually includes the determination of programs; allocation of resources; and the design, operation, and evaluation of subsystems. "It is the translation of strategic concepts into the implementation process."[4] A systems approach is also appropriate when managing a large complex organization, a major organizational element, a major program or functional activity, or a specific project.

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3. Blake, The New Managerial Grid (1978): 182.

4. US Army, Army Command and Management: Theory and Practice (19 August 1985): 3-8 (Cited hereafter as Army Management).

FIGURE 3. BASIC ARMY SYSTEM MODEL

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  INPUT                    ACTIVITY                   OUTPUT

  Money                The Process and Activities    Readiness, Prompt
  Manpower             That Organize, Train, and     And Sustained
  Materials            Equip the US Army             Combat Units

            Budget                    UNITREP
      Enlistment Criteria             ARTEP
      Equipment Specifications        AGI (etc.)

                            Feedback
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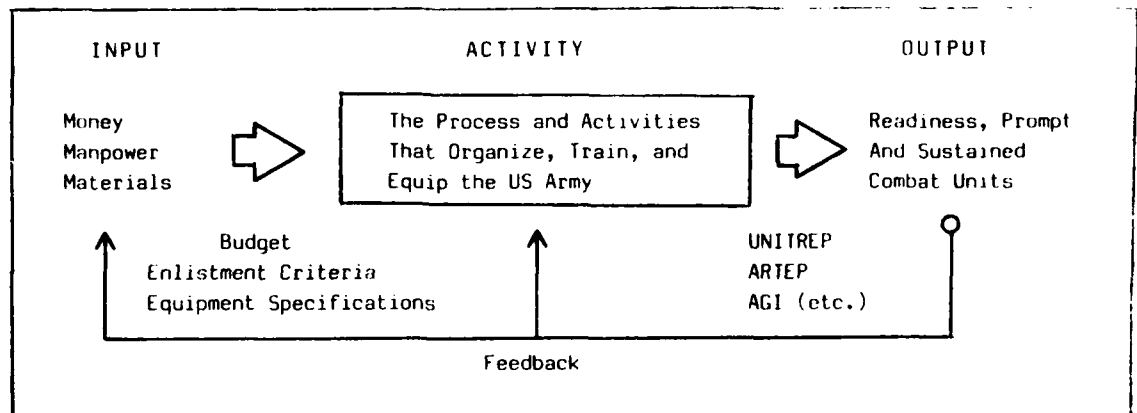
SOURCE. Adopted from US Army, Army Command and Management: Theory and Practice
(19 August 1985): 3-5.

The system perspective directed in the Army management

philosophy is demonstrated in figure 3, the Basic Army System Model. The

inputs of the system are ultimately transformed by an activity that

results in the desired output. Congress provides the money, manpower is

derived from recruiting, and materiel comes from industry. If

management and command are to influence the system, they must apply

leadership and management effectively in the activity or transformation

stage of this model. The Army has a mandate in Section 3062(b), Title

10, US Code, to be organized, trained, and equipped primarily for prompt

and sustained combat incident to operations on land. While there may be

numerous intermediate outputs, in accordance with the mandate the

ultimate output of the Army is combat ready units designed for prompt

and sustained combat.

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"The Army is a contrived system...It is an imperfect system constructed by imperfect people."[5] Information about the output or the process utilized to obtain the output is fed back to the leadership so that necessary changes and adjustments can be made. The Unit Status and Identity Report (UNITREP) provides feedback information to the leadership on three elements effecting readiness: training, personnel strength, and equipment. Other feedback mechanisms are inspections. training evaluations, proficiency tests, and budget submissions.

The Functional Life Cycle of the Army

Force integration is the translation of system theory into operational reality. A good definition for force integration is "the introduction, incorporation, and sustainment of doctrine, new organizations and/or equipment into the current force structure without reducing readiness."[6] In terms of the Basic Army System Model, force integration may be viewed as maintaining constant output while the transformation activity absorbs significant change. Thus the focus of force integration centers on those subsystems that support the overall organizing, training, and equipping of the US Army.

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5. US Army, Army Management (19 August 1985): 3-4.

6. US Army, Army Management (19 August 1985): 3-10.

FIGURE 4.   THE FUNCTIONAL LIFE CYCLE OF THE ARMY
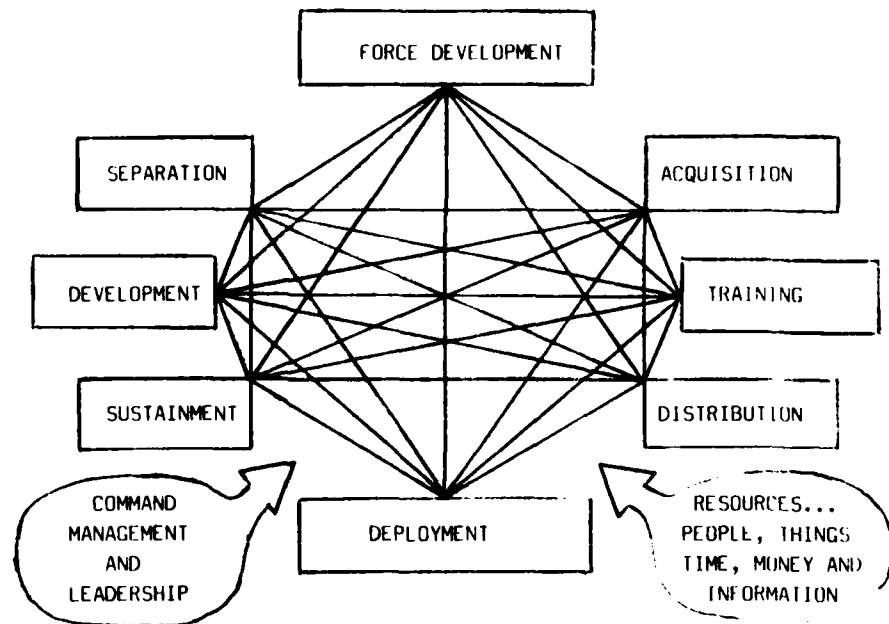
SOURCE.   Richard R. Trefrey, "The IG: Inspector But a Teacher, Too," Army Magazine (October 1982): 132.

As alluded to earlier, the output of the Army system is combat

ready units, which in theory, should provide the best combinations of

people and things to accomplish the mission.   The Functional Life Cycle

of the Army (FLCA) depicts this view fully.^{7} There are eight functional

areas depicted in figure 4, The Functional Life Cycle of the Army: force

development, acquisition, training, distribution, deployment,

sustainment, development, and separation.   Resources and

leadership/management are applied to these functions to make the system

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7. Richard G. Trefry, "The IG: Inspector But a Teacher, Too", Army
Magazine (October 1982): 132-135 (Cited hereafter as "The IG" in Army
Magazine).

perform. Generally, individual resources move clockwise through the
model during their life-span. The system requires Army leadership to
resource and control all of the functions continuously since critical
resources will be present in each functional stage.

Force development is the first phase of the life cycle and is
the basis underlying all other functional areas. The purpose of Force
Development "is to develop a force structure within constrained
resources capable of deterring or defeating a perceived or real
threat."[8] It is accomplished by translating organizational concepts,
based upon doctrine, current technologies, and manpower constraints,
into a balanced mix of combat, combat support, and combat service
support units.

Logically the people and things listed in the requirements and
authorizations documents must be acquired as necessary to accomplish the
mission. Acquisition of these required resources provides substance to
the force structure. The acquisition of people and things in this
context is the initial procurement activity.

Manning the force is the process that translates requirements
for people into trained soldiers. It involves manpower management,
authorization management, and personnel management and it is closely
linked to materiel acquisition and force development.

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8. US Army, FC 100-11, Force Integration Corps/Division (July 1985):
1-1.

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Materiel acquisition has been formalized by the Department of
Defense (DOD) to provide structure and control throughout the materiel
system life cycle. This formal management structure is entitled the
Life Cycle System Management (LCSM). To ensure that necessary support is
available when a new system is fielded major systems require Integrated
Logistics Support (ILS). ILS planning begins almost concurrently with
the initial effort to develop a materiel system, and "tracks" its
progress through the LCSM.

Acquired personnel must be trained. Army policy requires that
they must be "imparted with the discipline, drill and practice of the
military."[9] The training function is the vehicle for accomplishing this
orderly transition from civilian status to military life. Congruent
with the FLCA, the training function encompasses only the training base
of the Army's overall training system. Training in units and training
support are the other two major systems of the Army's training system
and they are considered part of the sustainment and development
functions. The Army's training base provides the individual or
collective training conducted by service schools, training centers, or
other educational institutions sanctioned by the DOD. This training
function is the military occupation specialty (MOS) producing aspect of

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9. US Army, Army Management (19 August 1985): 3-11.

the training cycle. It is applicable to units down to company/battery/troop level for training of secondary MOSs as well as on-the-job training.

The distribution function is assigning or transferring people or material from entry or wholesale level to the user, the units. This must be accomplished according to established priorities and constraints developed in the acquisition, deployment, and sustainment functions of the model.

The deployment function is to deploy units, people, and things in the Continental United States (CONUS) and overseas in accordance with the Army's worldwide commitments. This function involves not only agencies of the Army and DOD but also civilian and foreign transportation agencies.

The sustainment function, in peace or war, requires training an organization to a designated level of capability. Through the utilization, replacement, repair, and rotation of existing assets a trained unit is sustained. The ten classes of supply, authorized stockage lists (ASL), prescribed load list (PLL), scheduled and non scheduled maintenance, and training dealing with common soldier skills

are just a few examples of the techniques used to sustain people and materiel. "The Army sustains itself through the acquisition and use of resources to include people, things, money, time, and information."[10]

The development function is represented by the Army's constant training and upgrade of equipment and materiel. The development function is accomplished through many differing actions undertaken to improve readiness. For example, the Army develops individuals by enlisted and officer education programs. While units are developed through collective training using techniques such as the Army Training Evaluation Program (ARTEP), Emergency Deployment Readiness Exercise (EDRE), and Operational Readiness Tests (ORT). Equipment is developed by constant research and development activities, modification work orders, and product improvements.

The separation function is separating people and equipment from service. Personnel are separated from the service either by retirement, not reenlisting, reductions in force, mandatory retirement, or dying on active duty. Materiel is separated from the Army by consumption, DOD property disposal offices (PDO), or through foreign military sales (FMS).

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10. US Army, Army Management (19 August 1985): 3-12.

Resources must be carefully planned and coordinated to impact properly in the life cycle model. The Army Planning, Programming, Budgeting, and Execution System (PPBES) is the formal process by which strategy and structure needs are linked to resource requirements. The Army's PPBES responds to and is dependent upon the DOD Planning, Programming, and Budgeting System (PPBS).

Command and leadership must influence the transformation process of this dynamic system. Commanders and leaders must formulate objectives and make them operational as the purposes and goals of the organization; develop and maintain the organization as a viable, functioning entity; and provide activities which best promote organizational performance. Commanders and leaders must constantly be concerned with how things relate to each other. As can be expected, there are frequent frictions and conflicts between the functions and phases of life cycle management, unit management, and personnel management. Decisions must therefore be made to maintain the proper balance between the conflicting segments in order to accomplish the mission.

Achieving and maintaining a pro-active, organizationally healthy environment requires that agencies, commands, and units focus on readiness and combat-ready units of the Army in a coordinated way. The FLCA model is a framework of how the Army runs while both logically and coherently relating to the horizontal as well as the vertical functions

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within it. As explained by the Army Inspector General, "These functions, while standing alone, do not represent a system, but when we apply feedback loops between any and all of these functions and provide the necessary resources to enable leadership, command and management to do its job, we then have a functioning Army at any level of the organization."[11]

Resourcing in the Army

A discussion of change within the Army is not complete without a further explanation of how the Army obtains its resources. Without resources change will never occur. The Army Planning, Programming, Budgeting, and Execution System (PPBES) is the formal process by which strategy and structure needs are linked to resource requirements. The Army PPBES responds to and is dependent upon the DOD Planning, Programming, and Budgeting System (PPBS). PPBES begins with the planning phase that addresses the development of military strategy and defense policies designed to attain national security objectives. It corresponds with the force planning phase of the force development process. Force objectives and capabilities, as well as resource

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11. Trefry, "The IG" in Army Magazine (October 1982): 132.

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projections envisioned to counter the estimated theater threats are evaluated. The information that results from these evaluations are matched with the Joint Strategic Planning Document (JSPD).

Based upon Presidential guidance and information furnished in the JSPD, DOD publishes the Defense Guidance (DG). The DG provides guidance for the preparation of service program projections envisioned to satisfy strategy needs which are formalized in Army Program Objective Memorandum (POM). Information from the Major Army Commands (MACOM) Program Analysis and Resource Review (PARR) is integrated in the POM.

When approved by DOD, the POM is used to update the five-year defense plan (FYDP). The FYDP constitutes the DOD working summary of approved programs, inclusive of related total obligation authority, manpower, and force levels in terms of major missions program and support objectives. The approved POM expresses Army program projections into balanced allocations of forces, manpower, materiel, and dollars needed to accomplish the national security objectives.

Army guidance (AG) is issued to the Army staff and MACOMs in four volumes. Volume I is the Army plan (TAP) produced in December. Volume II is the development guidance produced in August and documents and contains instructions for MACOMs to prepare their Program Analysis and Review (PARR) and Modernization Resourcing Information Submission (MRIS). Volume III is the Supplemental Planning and Programing Guidance produced in November and provides DA directed Program Development

Increment Packages (PDIP) costing requirements. Volume IV is POM
Writing Guidance produced in March and provides instructions for writing
the POM.

The May Program Budget Guidance (PBG) is issued to the MACOMs
before receipt of DOD guidance, contained in the Program Decision
Memorandum (PDM), and constitutes the formal reply to the MACOMs PARR
submission. The PBG is updated three times a year (February, May and
October). The resource information is based on the regularly scheduled
updates of the FYDP. The February PBG establishes the specific base used
for subsequent POM development. The October PBG reflects the Program
Decision Memorandum (PDM) impact on the POM submission and documents the
Command Operating Budget (COB).

The COB is used by the MACOMs and installations to show their
command operating budget. At the installation level the COB is the
expression of requirements in terms of manpower, materiel, and dollars
for the operation of the installation. Mission goals are depicted as
projected workloads and priorities. The COB is consolidated at the
MACOM level and then forwarded to the Army staff (ARSTAF). The ARSTAF
consolidates all the various inputs into the Army Budget Estimate (ABE)
which represents the Army's request for funds and manpower from
Congress.

The ABE with the other services' budget estimates, are used to update the FYDP to reflect the latest cost projections of the Services. DOD uses the Services' budget estimate in reaching the Program Budget Decision (PBD). The PBD reflects the budget levels at which Services programs have been approved for inclusion in the DOD portion of the Presidential budget which is then forwarded to Congress. The FYDP will also be updated for the third time in the PPBS cycle to reflect the cost estimates for the major programs addressed in the Presidential Budget. The Congress then goes through its own decision making process and authorizes programs and appropriates dollar amounts to specific programs for implementation.

Subsystems of the Army

"Though a simple system can be quite large in size, virtually all large systems are truly complex and consist of many types of specialized parts or subsystems."[12] A system is something that can be seen as a whole, considered as a single entity, or defined as something

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12. Addison C. Bennett, Improving Management Performance in Health Care Institutions (1978): 42 (Cited hereafter as Improving Management Performance).

complete. "This perspective views an organization as a complex institution of units and work groups that are related and dependent on each other."[13] Business organizations, health organizations, and armies are all man-made systems that have a dynamic interplay with their environment.

The Army is organized as a result of conscious decisions on "how the Army is to perform its tasks and how it is to deal with its environment."[14] It is important to understand why major units are arranged as they are, and why units and subunits are linked together as they are. Such insight is necessary for a fuller understanding of how the Army operates as a system; it also "enables one to weigh the advantages expected to be derived from changes to the system against the turmoil which reorganizations invariably bring."[15]

"The Army can be considered an open organizational system of three primary components; the combat, production, and integrating/coordinating subsystems."[16] Each of these subsystems has tasks to accomplish, each subsystem operates in a given environment and each requires and acquires resources.

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13. US Army, AR 5-1 (15 September 1983): i.

14. US Army, Army Management (19 August 1985): 8-1.

15. US Army, Army Management (19 August 1985): 8-1.

16. US Army, Army Management (19 August 1985): 8-1.

The purpose of the production subsystem is to convert raw materials into the intermediate goods required by the combat subsystem. It functions by securing from its resources the raw materials for its many production efforts. The task is accomplished through its structure. It is important to realize that there is no intent by the production subsystem to provide finished products in personnel or equipment to the combat subsystem. Schools, training centers, laboratories, arsenals, procurement and test organizations are all part of this production subsystem. Other parts of the production subsystem provide sustaining support to the entire organizational system, such as health care, commissary support and other common installation services. The production subsystem serves to meet the needs of the combat subsystem. This is its primary function. This continuing support plays a large role in maintaining the system's overall combat readiness. "Integration is achievable through procedures and the hierarchy."[17]

"The combat subsystem's major task is to convert the Army's intermediate products, obtained from the production subsystem into combat-ready forces. Each element of its structure welds together individual soldiers, equipment, and procedures into combat ready units."[18] This is accomplished through unit training and developing the force. The combat subsystem must interface with the other two

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17. US Army, Army Management (19 August 1985): 8-2.

18. US Army, Army Management (19 August 1985): 8-4.

subsystems. It is through them that resources, doctrine, and management are obtained. During peacetime the production subsystem and the integrating/coordinating subsystem create the combat subsystems environment.

"Tying all the subordinate subsystems together is the integrating/coordinating subsystem, which, for the Army as a whole, is Headquarters, Department of the Army"[19] (HQDA). HQDA decides what is to be produced or accomplished by the system and sees to it that the system performs as expected. Although decisions are made at this level, Department of Defense (DOD) and Congress represent the final decision making authorities in this system. As a result, the integrating/coordinating subsystem is also the source of money for all three subsystems, obtaining it from its input into the DOD PPBS. The integrating/coordinating subsystem must ensure that the units formed will accomplish their assigned tasks effectively and efficiently. This includes determining the nature of the demands and requirements, allocating responsibilities, objectives and performance requirements, as well as evaluating the performance of all three subsystems. Perhaps the largest challenge to the integrating/coordinating subsystem is to "bring about change in cases where performance does not meet requirements."[20]

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19. US Army, Army Management (19 August 1985): 8-5.

20. US Army, Army Management (19 August 1985): 8-5.

When the Army attempts to resolve a perceived discrepancy it follows a practice of looking first to its doctrine for a solution, then to a training solution, then to a structural design solution, and finally to a new system acquisition. It is important for the action officer, commander and staff officer to understand this process of how the Army brings about change. Since the methodology of change is examined from the medical unit perspective, an understanding of the distinctive characteristics of medical units is necessary.

Distinctive Medical Characteristics

Medical units are units within the Army's combat subsystem. They are combat service support units that deploy into a combat zone to provide health care support. Health care organizations have a number of interesting and often contradictory characteristics that present a special challenge to managers attempting to understand the change process. As mentioned earlier, these characteristics include: the nature of the task, the nature of the personnel, the environmental constraints, the organization's structure, and the basic value orientation and expectations within the organization.

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The nature of the medical task is labor intensive. The care of
injured or sick personnel requires large allocations of resources. The
task is accomplished by highly skilled professionals. Health care
providers are well educated, quality people. However, even with
excellent training, the provision of medical care still involves great
uncertainties, vaguenesses, and ambiguity. Caring for the sick and the
wounded is the application of both known science and mature, experienced
judgment. These characteristics are compounded by the reality that
medical units are devoted to the care of individuals often struggling
with the utmost elemental problems of life and death. "In no other part
of the work world do human failures and frailties play havoc with
organizational outcomes to the extent they do in the health care
workplace."[21] Providing medical support in a combat environment only
exacerbates this frailty.

Two critical factors affecting change are the organization's
professional personnel and their basic orientation to problems. The
high-skilled professionals are considered to be college trained,
technical personnel who possess the skills necessary to provide the
health care system. These professionals are accountable for results and
responsible for getting things done. In exchange they are given a
significant degree of autonomy. These high-skilled professionals

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21. Bennett, Improving Management Performance (1978): x.

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also have a great deal of mobility, not only within the organization, but also within the organization's environment and society. "The high-skilled professional is a highly educated specialist who largely operates independently, determining what needs to be done and doing it without direct management."[22]

Medical units must operate within the combat subsystem to the same standards as other health care providers in the United States. Medical supplies and equipment must be certified and approved for use by the Federal Drug Administration and/or the DOD Medical Standardization Board (DMSB). This constraint is often frustrating to commanders and staff officers involved in health care when a local protocol often makes better sense. These environmental constraints also lengthen the process of bringing new items into the federal supply system, and creates less than optimal pieces of equipment for use in the combat subsystem.

The distribution of power within a health organization makes it very difficult to manage the internal environment. "The dominant actors, primarily trained to make decisions in an authoritative manner, find it difficult to adapt to more consultative approaches characterized by planned change efforts."[23] Management may only have tangential

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22. Charles R. McConnell, Managing the Health Care Professional (1984): 129.

23. Arnold D. Kaluzny and S. Robert Hernandez, "Managing Change in Health Care Organizations," Medical Care Review (Vol 40, No 3, Fall 1983): 163.

relationships with the high-skilled professional. Paradoxically, the management structure in medical units normally does not dictate how health care is provided.

There exists in medical units a dual chain of command within the high-skilled professionals that affect everyone in the organization. The patient care providers dictate patient care, medical supply usage, patient flow within the unit, treatment protocols, and other patient related activities. The commander, who may or may not be a physician, and the military chain of command dictates unit location, uniforms, alert status, and other non-medical administrative tasks. The management structure must coordinate with the patient care providers on unit moves, patient evacuation, medical supply rates, patient administration, and other matters concerning patient care. The patient care providers' opinions and decisions are rarely countered and/or reversed. Generally, this will occur only when directed from higher authorities or the tactical situation dictates other courses of action. Although the chain of command in medical units is in control and dictates action, the power of the organization and the conservation of fighting strength by medical treatment is directed by the patient care providers.

By definition health care organizations are imbued with a notion of providing care to suffering individuals. Moreover, in medically desperate situations, the prevailing norm is to do something without regard to financial cost and/or liability, leading to adoption of many

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poorly understood and extremely costly technological innovations. The ideology of providing care to suffering individuals at all costs has transformed itself into a set of rules and expectations causing health care organizations to be held at an ever higher standard of technical performance.

These facts make medical units distinctly different from other military units. These differences have been recognized and acknowledged as part of the medical units culture. Providing health care is a time sensitive, specialized function that can best be provided by enhancing these distinctive characteristics. This differentiation must be balanced in medical units by the combat imperatives of unity of effort, mobility, flexibility, and supportability. Force Development is the process that the Army Medical Department (AMEDD) utilizes to develop these units and balance the differentiation with the combat imperatives.

Doctrine

As mentioned earlier, changing doctrine is the first choice in resolving a perceived deficiency or shortfall in the force. Army policy dictates that training, organizational structure, and materiel systems

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be soundly based in doctrine. "Army doctrine is derived from approved operational concepts."[24] The concept-based requirements system (CBRS) determines the best way that medical units can support the battlefield of the future. It accomplishes this by considering what the medical unit must do to accomplish its mission. The CBRS determines how the support was provided in the past; and what the capabilities and shortcomings of the threat are currently and will be in the future. For example, the chemical threat, the mobility and nonlinear battlefield concepts of AirLand Battle, and the increased lethality of modern war have changed the Army's concept of health care support. In order to meet these challenges, concepts are developed by the AMEDD combat developer and are utilized by the subject matter experts (SME), force developers and materiel developers. Approved concepts are then published in the TRADOC 525 series pamphlets.

The medical portion of the combat service support, Mission Area Analysis (MAA), is designed to discover deficiencies in how medical units support the force, identify corrective actions, and develop those corrective actions in light of current technology. "It stresses doctrinal solutions, followed by training, organizational, and lastly, materiel solutions."[25] The MAA process is the Army's methodology to

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24. US Army, FC 100-11 (July 1985): 2-4.

25. US Army, FC 100-11 (July 1985): 2-7.

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provide a continuing examination of mission areas. It is an extensive

assessment of force capability. The MAA for medical units are conducted

every three years.

All MAAs are summarized in a document called the Battlefield

Development Plan (BDP). The BDP document consists of the following

eight sections: historical perspective, national objectives, threat,

Joint Long-Range Strategic Appraisal (JLRSA) and Army guidance, AirLand

Battle doctrine, mission area structure, MAA process, and prioritized

major deficiences. "It integrates deficiencies by the MAA, prioritizes

them for the Army, and translates them into specific requirements and

presents them to Headquarters, Department of Army."[26] The Mission Area

Development Plan (MADP) is completed during BDP development and provides

the necessary detail for each proposed solution. This plan converts

proposed solutions into specific programs and supports input into the

Planning, Programming, Budgeting, and Execution System (PPBES) process.

The completed MAA and BDP provide direction for writing AMEDD doctrine,

developing training programs, initiating changes in organizational

structure, and developing new materiel systems.

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26. US Army, FC 100-11 (July 1985): 2-7.

Training

Doctrine is one way the Army attempts to resolve discrepancies. Training is the second method of resolving discrepancies. "The Army's training goal is to develop and sustain a combat-ready force prepared to mobilize, deploy, and defeat enemies of the United States in support of worldwide national commitments."[27] Like all units, medical organizations must train under realistic combat conditions, train to standards, train to integrate new doctrine, organizations and equipment, train to conserve resources and train to sustain themselves and their patients. "To effectively support combat forces on the modern battlefield, Army Medical Department (AMEDD) units must anticipate and prepare to operate under conditions which will prevail on a battlefield that will be mcre lethal and violent than have ever been experienced before."[28]

Training in medical units is the individual and collective training conducted to sustain the proficiency needed to operate a health service support system. This training consists of the normal military skills that all soldiers must possess to act within a unit and survive

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27. US Army, FC 100-11 (July 1985): 4-2.

28. US Army, ARTEP 8-122 Medical Command and Control Units (Non-Divisional) (not dated): iv.

on the AirLand battlefield. It also consists of actual patient care techniques for specific MOSs. This presents a challenge to training managers in medical units.

"The integration of new doctrine, organizations, and equipment represent critical training tasks that should be reflected in the unit training program."$\frac{29}{}$ Commanders and staff officers must be educated in doctrinal changes and support requirements for new equipment or different structures must be identified and incorporated into plans and procedures. Training must incorporate these changes in order that the medical unit can accept and implement new capabilities.

Training support provides the central management of training materials and services which supports both the training base as well as the training in units. The Academy of Health Sciences, US Army (AHS) develops and provides exportable unit training packages, Army Training and Evaluation Program (ARTEP) and other support materiel for the medical units. Army modernization training (AMT) is a Department of the Army program designed to aid in the transfer of information about new doctrine, organizations, and equipment. It consists of new equipment training (NET), displaced equipment training (DET), doctrine and tactics training (DTT), and sustainment training (ST).

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29. US Army, FC 100-11 (July 1985): 4-11.

Force Development

Organizational design is the third method used to resolve discrepancies. It is a component of the force development process. Force development is structured into five phases: organizational design, force planning, force structure, force programming, and force management. These five phases together provide the Army's requirements and authorizations for people and materiel. Organizational design deals with the "development, design and documentation of the organizational blueprints and guidelines that the Army uses to build its force structure."[30] For medical units this is accomplished at the Academy of Health Sciences, US Army (AHS) by the AMEDD combat developer. The principle outputs of this design effort are the tables of organization and equipment (TOE) for medical units.

Organizational design is the designing of unit models which consist principally of two interactive processes: developing the basis of issue plan (BOIP) and the qualitative and quantitative personnel requirements information (QQPRI); and then developing the table of organization and equipment (TOE).

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30. US Army, FC 100-11 (July 1985): 3-14.

The BOIP provides personnel and equipment changes required to introduce a new or modified item into the Army inventory. The BOIP generally causes TOEs to be revised, or in some cases creates the requirement for a new TOE. "The Army's goal is to have all BOIPs developed, staffed, approved, and published in the consolidated TOE update (CTU) 4 months prior to the earliest first unit equipped date (FUED)."[31]

The QQPRI is a compilation of organizational, doctrinal, training, duty position, and personnel information that accompanies the BOIP. It is used to determine the need to develop or revise military and civilian occupational specialties and to prepare plans for the personnel and training needed to operate and maintain new or improved equipment.

"Force design guidance, developed during the MAA process, provides the TOE developers with recommended TOE additions/modifications required to eliminate battlefield deficiencies."[32] A TOE prescribes the normal mission organizational structure, personnel and equipment requirements for a unit. TOEs are the basis for developing authorization documents.

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31. US Army, Army Management (19 August 1985): 12-5.

32. US Army, Army Management (19 August 1985): 12-5.

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"Army force planning focuses on the policy, guidance and force requirements established by the National Command Authority (NCA) and the Department of Defense (DOD)."[33] In that regard Army planning culminates in the development of the Army plan (TAP) which is constrained by expected dollar and manpower levels provided by DOD guidance. The AMEDD is not directly involved in this process. TAP provides by types the numbers of divisions and separate brigades required to perform the Army's mission. Nevertheless, further refinement of the TAP is required for AMEDD implementation.

Force structuring takes the major combat forces in the TAP and according to various scenarios, develops the total Army force. The computer assisted process, total Army analysis (TAA), develops the combat support, combat service support, and the general support forces necessary to sustain the TAP. It is this force that "is doctrinally sound, is sustainable with required support, and includes all Army components."[34] Throughout this process the major Army commands (MACOMS) and the Army staff (ARSTAF) force developers provide input and evaluate the force. The final output is reviewed by the General Officer Steering Committee and forms the basis for the development of the Army's five-year program.

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33. US Army, FC 100-11 (July 1985): 3-18.

34. US Army, FC 100-11 (July 1985): 3-19.

Force programming translates the force requirements from TAA

into a specified, detailed program that is ready to execute. The

program objective memorandum (POM) describes all aspects of the Army

plan and how the Army intends to implement its program. Program

development incremental packages (PDIP) are "used to associate force

structure changes and other force improvements with resources (manpower

and dollars). Each PDIP is designed to be a complete presentation of

resource requirements so that decision makers can review, analyze, and

prioritize the action it supports."[35] The resources provided for each

PDIP are sent to the MACOMS in the form of program budget guidance

(PBG).

The final phase in the force development process is force

management. The focus of this phase is the authorization documents.

The development of authorization documents is supported by the Army

authorization document systems (TAADS). Twice a year these

authorizations are used to develop planning goals for personnel and

equipment planners. The structure and composition system (SACS)

supports this effort by developing personnel and equipment requirements

for a seven-year period covering the current year, budget year, and five

years of the POM.

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35. US Army, FC 100-11 (July 1985): 3-20.

Life Cycle System Management

The fourth method of inducing change in the Army is through the acquisition of equipment and systems. The Office of Management and Budget (OMB) and DOD has provided guidance for major system acquisitions policy and procedure. The Army in accordance with its own regulations must comply with these guidlines and operate within the constraints dictated. The DOD basic policy is to ensure that acquisitions of major defense systems are conducted efficiently and effectively in order to achieve the operational objectives of the US Armed Forces in their support of national policies and objectives.

Life cycle system management divides the formal life cycle of a developmental item into four phases: concept exploration (CE), demonstration and validation (D&V), full-scale development (FSD), and production and deployment (P&D). There are four key decision points that mark the end of one phase and the beginning of the next phase. "The mission need determination marks the start of the formal life cycle and the end of the gestation period."[36] Milestones I, II, III represent the decisions to continue into the D&V phase, the FSD phase, and the P&D phase, respectively.

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36. US Army, DARCOM HDBK 700-1.1-81, Primer ILS Integrated Logistics Support (Jan 85): 10.

The basic policy of DOD acquisition can create dysfunction in change management procedures. For example, the change may not meet the organizational objectives of the particular subsystem, but those of the higher organization. This type of change effort is often not supporting the receiving unit's policies or objectives but supporting the national policies and objectives, or those of DOD. This may be offered as a reason, the M-1 tank was fielded in Europe before the Army production subsystem could fully support the tank. Units were reorganized; however, it took "off-line", special handling of support items to maintain the tank as an operationally ready piece of equipment.

"The overall goal of the Army's RDA is to deploy effective systems in adequate quantities, on time, and within budget at the least total life cycle cost. Special emphasis is placed on medium and long range materiel planning, product improvement, and life extension programs."[37] Major state-of-the-art advancements are to be sought only in carefully selected areas such as medical materiel. "Reliability, availability, and maintainability (RAM) goals and Integrated Logistics Support (ILS) are given emphasis equal to that placed on obtaining system performance, schedule, and cost objectives."[38]

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37. US Army, Army Management (19 August 1985): 18-1.

38. US Army, Army Management (19 August 1985): 18-1.

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The Army objectives of research, development, and acquisition (RDA) are given in AR 70-1. They can be summarized as to maintain a strong technology base, develop an acquisition strategy for each system, acquire materiel systems within budget, manpower and other constraints, and from the outset establish a formal program of Integrated Logistics Support (ILS). "The RDA process is a critical component of the Army's force integration efforts."[39] The managerial process of transforming a concept into a piece of hardware is conducted by individuals in the various organizations responsible for RDA within the DOD and the various services. The labyrinth of action officers and organizations goes from Congress to the civilian industrial base through many subsystem processes before "trickling down" to the using soldier.

The program management approach to systems acquisition is a distinct departure from the services' traditional method of establishing functionally oriented organizations to carry out well defined, repetitive, or long term continuous tasks. "This approach requires the program manager to establish arrangements among his organizations, other military organizations, and various contractors and to coordinate their efforts to accomplish program objectives efficiently."[40] In achieving

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39. US Army, Army Management (19 August 1985): 18-1.

40. US Army, Army Management (19 August 1985): 18-6.

this goal of system development, the program manager must plan, direct, and control the allocation and use of all resources that affect his program. The program manager "is responsible for the definition, development, procurement, production, and distribution of his system."[41]

The materiel needs of the Army are generally satisfied through four alternative methods; product improvement of current standard equipment, acquisition of nondevelopment items (NDI), adaptation of commercial items for military use, and initiation of a new materiel development program. "Product improvement is usually the preferred method to satisfy requirements."[42] This method exploits the performance growth potential inherent in already developed systems.

The purchase of existing domestic or foreign materiel items that do not require any developmental work can provide a relatively quick, low cost response to requirements. Non developmental items (NDI) are a major source of medical consumable supplies like Ringers Lactate, hypodermic needles, syringes, etc.

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41. US Army, Army Management (19 August 1985): 18-7.

42. US Army, AR 40-60, Policies and Procedures for the Acquisition of Medical Materiel (15 March 1983): 3-1.

Modifications of existing commercial, other service, or foreign developed items may be necessary to meet specific requirements. Items like field sterilizers, Life Pak 5, and Ambu Bags are items that have been modified for medical unit use. If modification does not require research, development, test and evaluation (RDTE) funds, NDI procedures apply.

A new development program is usually the longest and most costly alternative means for satisfying a materiel need. DEPMEDS and the new MES Clearing Station are both examples of new development. New materiel systems will emphasize simplicity, austerity, supportability, interoperability with the systems of allies, and preplanned product improvement.

Acquisition of Medical Materiel

The Surgeon General (TSG) of the Army will "monitor life cycle management of Army medical material from research and exploratory development through production and deployment."[43] TSG fulfills this

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43. US Army, AR 70-1, System Acquisition Policy and Procedures (July 1983): 2-7.

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responsibility through several commands, agencies, and senior level committees. After formal approval by TSG, the acquisition process for medical materiel is conducted according to an AMEDD Priority Program (PRIPROG) developed by the Academy of Health Sciences, US Army (AHS), US Army Medical Research and Development Command (USAMRDC), US Army Medical Materiel Agency (USAMMA), and the Army Medical Department Technical Committee (AMDTC).

AR 40-60 "establishes basic Army Medical Department policy and procedures to develop, acquire, and field medical materiel used by the Army."[44] This regulation supplements Department of Defense guidance by giving the AMEDD a particular means to develop, acquire and field materiel within the guidance provided to the Army. "The acquisition process satisfies materiel requirements generated by doctrinal organizations and organizational revisions to tables of organization and equipment (TOE). It further satisfies user-generated requirements, state-of-the-art advancement, and initiatives to enhance materiel readiness."[45]

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44. US Army, AR 40-60 (15 March 1983): 1-1.

45. US Army, AR 40-60 (15 March 1983): 1-1.

TABLE 2.   OBJECTIVES OF THE ACQUISITION PROCESS FOR
MEDICAL MATERIEL SYSTEMS

To outline procedures for developing and acquiring materiel systems from investigation of the materiel concept through deployment to the Army in the field.

To insure that materiel provided to the Army in the field meets approved operational requirements and is capable of being manned effectively and supported logistically.

To insure all materiel fielded is safe for use as determined by a health hazard assessment (HHA).

To identify organizational policies and responsibilities and implement an effective management structure to develop and acquire medical materiel.

To modernize medical assemblages and enhance overall TOE development and materiel readiness.

To improve coordination and staffing within the AMEDD between Major Army Commands (MACOMs).

To provide effective materiel systems to maintain the health of the forces when considering demands on the delivery of health care created by technological advancements in combat weapons and tactics.

SOURCE.   US Army, AR 40-60, Policies and Procedures for the Acquisition of Medical Materiel (15 March 1983): 1-1.

The objectives of the acquisition process for medical materiel systems are listed in Table 2. Materiel systems will be acquired within the shortest reasonable time. "The goal is to achieve first unit equipped date (FUED) within three years after full-scale development (FSD) approval and to do so within established cost goals without incurring inordinate risks."[46]

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46. US Army, AR 40-60 (15 March 1983): 1-2.

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The medical materiel acquisition process (MEDMAP) formalizes the process by which TSG implements responsibility for medical research, development, test, and evaluation (RDTE) and life-cycle management of Army medical materiel. It establishes both requirements and procedures for research, development, and acquisition of medical materiel based upon two major objectives. MEDMAP objectives provide a framework permitting the use of the most cost effective and operationally efficient means of achieving the desired capability and to improve the timeliness for acquiring and fielding medical materiel.

Management control for the MEDMAP will be exercised through periodic joint working groups (JWG), test integration work groups (TIWG), in-process review (IPR) and the AMEDD technical committee (AMDTC). A JWG is convened at the call of any participant to revise project status or to determine a proper course of action when a formal decision is not required. A TIWG makes the integration of test requirements easier and accelerates the coordinated test program (CTP) process.

An IPR is required to review a materiel proposal for continuation at the end of the demonstration and validation phase before movement into the full-scale development phase, and before movement into the production and development phase. The IPR represents the milestone decisions briefing in the life cycle system management

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process. Non-development items (NDI) acquisition normally requires only one IPR between the requirements definition and the acquisition and deployment phase but an IPR can be called at any time by one of the participants.

The AMEDD technical committee (AMDTC) serves as a permanent advisory board to TSG. It provides general officer review of field medical support systems. Simply stated, the committee has oversight and review responsibilities for combat health care doctrine and it is the principal staff interface between the combat developer and the materiel developer. The primary objective of the AMDTC is to develop recommendations for approval of TSG concerning doctrinal modification for medical support, and specific field requirements for this modification. It also provides recommendations for improving existing field materiel and its use, evaluation of operational tests of concepts or materiel, and quarterly review of status reports of materiel systems and constructive evaluation of the reports.

"The AMEDD PRIPROG for the MEDMAP provides TSG with a formal mechanism for setting AMEDD priorities to develop and field medical materiel for support of TOE requirements within approved priorities for the Army."[47] Representatives from the materiel developer (USAMRDC), the medical logistician (USAMMA), the training developer (AHS), the

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47. US Army, AR 40-60 (15 March 1983): 3-2.

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OTSG, and the combat developer (AHS) (the proponent activity and chairman) meet to review or update the PRIPROG at least yearly. Recommended priorities are in turn submitted to the Army Medical Department Technical Committee (AMDTC) for approval.

At a minimum, the following items are considered in the AMEDD PRIPROG; the overall Army and AMEDD objectives, Army program objective memorandum (POM) initiatives, contingency requirements and materiel readiness, available and projected funding resources, MEDMAP, and the Health Services Long Range Plan. The AMEDD PRIPROG provides TSG with a priority list of medical materiel requirements within funding programs to serve as a basis for input to the Army POM and provides a data base for preparation of acquisition proposals for new items and systems of medical materiel.

"Medical materiel proposals and requirements involving the need for change to MESs or new materiel requirements will be forwarded to the combat developer who will prepare applicable requirements documents if necessary."[48] Medical materiel proposals and requirements involving a product improvement are forwarded to Commander, USAMRDC for required review and action. A medical materiel proposal or requirement, to include product improvements may be initiated by the combat developer, the material developer, or the logistician. It is imperative however that the commander and staff officer realize that they cannot directly

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48. US Army, AR 40-60 (15 March 1983): 3-3.

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recommend materiel changes. Instead they must justify their requests to the combat developer, materiel developer, or logistician. This is a very cumbersome process due to the exigencies that these action officers must deal with.

Medical Equipment Set

AR 40-60 prescribes the policy and procedures to establish the methodology by which MESs will be revised or new MESs developed. The process has been structured to accommodate the US Army Training and Doctrine Command (TRADOC) review cycle for the TOE supported by the MES. A MES consists of medical and nonmedical items including expendable (consumable) supplies, durables, and nonexpendable equipment costing less than $3,000. "The materiel requirements for MES components will be derived from an automated modeling technique maintained and operated by the combat developer (AHS)"[49] Types and quantities of materiels are based on workload by patient condition and volume of patients projected. The development of new, as well as the revision of existing MESs will be accomplished within the time frames set for the cyclic review of current published TOE's and the submission of any draft plan TOE (DPTOE) to Commanding General (CG), TRADOC. The overall program and priorities for developing MESs are reviewed annually, documented by

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49. US Army, AR 40-60 (15 March 1983): 3-7.

the AMEDD PRIPROG, and approved by the AMDTC. "Minor changes involving specific components of an MES arising as a result of material proposals from the field, evolving medical technology, or proposals for deletion and/or replacement will be submitted to AHS for review."[50] These changes are retained for the next scheduled cyclic review of the MES.

A Review

Having exposed the reader to a brief introduction of the Army management system and the four methods that the Army follows when approaching change, it is necessary to review the direction of this thesis. Chapter one introduced the importance of change management. "Change sweeps through the highly industrialized countries with waves of ever accelerating speed and unprecedented impact."[51] To prevent the impact of this change from degrading the readiness of medical units, research on how medical units are to manage the change was undertaken.

Chapter two presented the change process as it has been researched and explained by Kurt Lewin, Edgar Schein, Arnold D. Kaluzny, Robert S. Blake, Robert J. House, Gene W. Dalton, and others. The attempt of this chapter was to develop change as a process that can be managed and to broaden the understanding of the characteristics of

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50. US Army, AR 40-60 (15 March 1983): 3-7.

51. Alvin Toffler, Future Shock (1970): 9.

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MICROCOPY RESOLUTION TEST CHART

NATIONAL BUREAU OF STANDARDS-1963-A
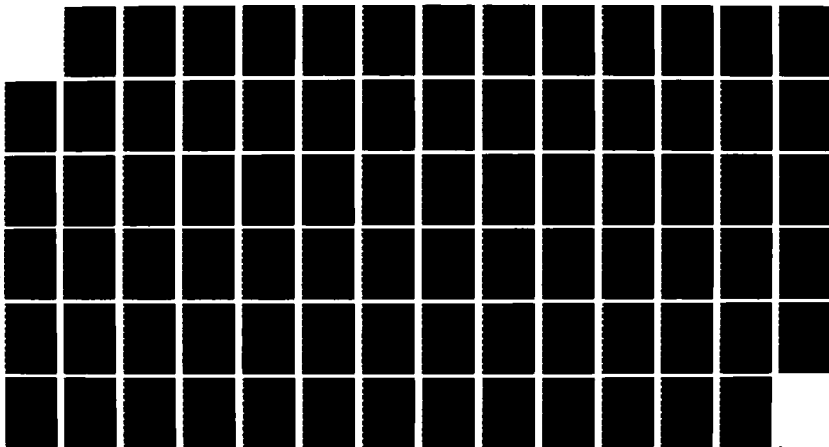
change. Organizations can be described as attempting to deal with change by the basic process of the Adaptive Coping Cycle. Several management models present the complexity, skills required, and a few techniques that are available to the military change agent.

Chapter three presented the methodology. Briefly stated, a literature search of the applied research on change management was conducted and the US Army doctrine and management system was investigated. A diagnostic model was developed that explains the functions of change within medical units. Three examples of change management illustrate the use of the model.

Chapter four is the investigation into the Army system. The Basic Army System Model, the Functional Life Cycle of the Army, doctrine development, training development, structure development and finally materiel acquisition was explained.

Chapter five will develop the change model and illustrate the ten functions of change by three examples. The model presents a conceptual tool that the commander, staff officer and action officer should utilize in their efforts to lead medical units through the transitions of change. It is a diagnostic tool that will assist them in determining the organization's ability to implement the proposed change.

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CHAPTER 5

God grant me the serenity to accept the things I cannot change,
the courage to change the things I can, and the wisdom to know the
difference.

                                            --Anonymous, The Serenity Prayer

Medical Examples

It is helpful to conceptually separate the Army into three
subsystems when discussing the change functions in medical units. An
example of planned change within each subsystem will be presented to
further demonstrate the functions of change and the use of the model.
The medical system program review (SPR), deployable medical systems
(DEPMEDS), and the fielding of the medical equipment set (MES), clearing
station are the examples selected for this thesis.

The selection of these examples is somewhat arbitrary. Many
other examples could have been utilized to demonstrate the need for
change management in medical units. Examples for the
integrating/coordinating subsystem could have been: the submission and
justification of medical program development increment packages (PDIP),

policies on staffing procedures for table of distribution and allowance (TDA) medical units being overlaid and staffed by table of organization and equipment (TOE) medical units, joint procedures for medical evacuation and theater blood support, the establishment of evacuation policy and the equipping of reserve component TOE hospitals.

Examples of requirements for change management within the production subsystem could have been: the development of the new field ambulances, the training package for the Life Saver Program, the concept development and investigation (testing) of the French Parachutist Surgical Unit (FPSU), the development of the modular medical support system, and the development of an automated medical management information system.

Examples of change management requirements for the combat subsystem could have been: the implementation of staffing procedures of TDA facilities out of TOE assets, the training of buddy aid and self aid within divisions and non divisional units, implementing changes created by the changes of the units being supported, training medical units in AirLand Battle doctrine and implementing structure changes caused by new doctrine. These fifteen examples just touch the surface of the changes that will impact on medical units. Medical units will adapt, cope, and transition through these changes and many, many more over the next several years.

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The boundaries of subsystems are not clearly defined. Addison C. Bennett emphasizes the point that "the very idea of a system is inextricably bound up with the problem of defining a boundary."[1] The functions of the integrating/coordinating, production, and combat subsystem overlap as well as interface. Functions may be accomplished outside their normal subsystem. The discovery of "who does what" is not as important as an understanding of the entire system, what must be accomplished within that system, and ultimately where the "cog" fits in the particular subsystem. Invariably, when looking for the one responsible for an action one is looking to place blame or "dump" the action. When one receives a compliment or a positive "stroke", there is no search because it is obvious who did the good job.

The military change agent should approach each situation from a total systems perspective, concerning himself with all the systems, subsystems, and components involved in that situation. "Wholeness in this sense is the degree to which every part of the system relates to every other part in such a way that a change in one part causes a change in other parts and in the total system."[2] Military change agents must use a leveling process in which one first looks at a single element then

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1. Addison C. Bennett, Improving Management Performance in Health Care Institutions (1978): 41 (Cited hereafter as Improving Management Performance.

2. Bennett, Improving Management Performance (1978): 41.

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at that element's relation with its immediate surroundings. As the

military change agent takes a step back from each subsystem, he not only

gains a better understanding of a particular subsystem but also sees how

the hierarchical component is affected by the surrounding elements of

the system with which it interrelates.

The Medical System Program Review (SPR) was conducted on 17 and

18 December 1984. The SPR was an "opportunity to relook the entire

medical system to support the US Army at War."[3] It integrated

technology with doctrine, tactics, techniques and organization design to

focus on the Army Medical Department's (AMEDD) dominant end product,

combat-ready units.

The Commandant, Academy of Health Sciences, US Army (AHS),

organized a General Officer Steering Committee which assembled five

panels. The five panels (Concepts, Doctrine, Training, Structure, and

Logistics) were charged to identify medical issues critical to current

and future Army initiatives. The "1990 medical Mission Area Analysis

Study"[4] was used as a point of departure. The General Officer Steering

Committee had monthly in-process reviews (IPR) from March through

October 1984.

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3. Raymond Leahey, Military Letter, Subject: Medical System Program
Review After Action Report/Action Plan (12 February 1985): 1.

4. Interview with Richard Houser, Assistant Commandant's Office, AHS,
Fort Sam Houston, Texas, 6 March 1986.

The panels were instructed to look for ways to improve

individual and unit productivity, take advantage of good ideas, develop

a medical system that was adequate but austere, and be aware of

war-stopping military occupational specialties. They were to focus

their attention on three major issues:

> "(1) The medical system should support the US Army
> at war in a continuum from FLOT through the CONUS base.
>
> (2) The system should be optimized to return to
> duty the maximum number of trained combat soldiers at
> the lowest possible level.
>
> (3) The go-to-war medical system should be ___5
> the basis of our peacetime health care delivery system."

The SPR as a technique of change management "can serve as one of

the most significant integrating devices for the whole Army."[6] This

example of change management involves all three subsystems.

The second example requiring the management of change is the

deployable medical systems (DEPMEDS). DEPMEDS is an initiative

mandated by Congress. It is DOD policy to standardize hospitalization

facilities deployed to a theater of operation. Deployable medical

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5. Leahey, Military Letter, Subject: Medical System Program Review After
Action Report/Action Plan (12 February 1985): 1.

6. US Army, Army Command and Management: Theory and Practice (19 August
1985): 8-7 (Cited hereafter as Army Management).

systems are defined as facilities that are "capable of being located in a desired or required area of operation during a contingency, war, or national emergency."[7] These systems can be composed of fixed contingency hospitals in theater, and hospital structures not operated during peacetime that will relocate to the theater of operation. The intent of the DEPMEDS is to standardize the future procurement of all three military services deployable hospital systems to increase efficiency and minimize cost.

A test of the DEPMEDS initiative, concept and equipment configuration was conducted from October 30 to November 11, 1984. "The 21st Evacuation Hospital from Fort Hood was the core unit, supplemented with personnel from all services filling roles of patient treaters, patients, and evaluators."[8] About 600 people from all four services were involved in the operation and evaluation of this 356 bed hospital. Subject matter experts (SME) and service representatives came and evaluated simulated patient flows through this hospital. Many

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7. Department of Defense, Department of Defense Directive 6430.2 (21 June 1984): 1-1.

8. US Army, "Services Join in Effort to Standardize for Combat," Medical Soldiers Outlook (Vol 2, No 3, Summer 1985): 3 (Cited hereafter as "Services Join" in Medical Soldier Outlook).

challenges were recognized and "some of the equipment in the test was found to be inappropriate for some mission requirements specific to one or more of the services."[9]

The third example is the fielding of the MES, Clearing Station. Seven MESs were issued to the Fort Bragg community, four to the 307th Medical Battalion, 82nd Airborne Division, and three to the 36th Medical Company, Clearing, 44th Medical Brigade. All the MESs received at Fort Bragg were assembled by the 32nd Medical Supply, Optical, Maintenance (MEDSOM) Battalion, 44th Medical Brigade and were issued in accordance with the June 1982 Forces Command (FORSCOM) Fielding Plan and supplemented by instructions from the XVIII Airborne Corps Surgeon's Office.[10]

Earlier in 1984, it was recognized that the fielding of the MES, Battalion Aid Station (BAS) created a management and mobility challenge for the using units. The issuing of the new MES, BAS for Fort Bragg was completed in early 1983. According to the fielding plan the using units were to receive the set, reconfigure the set for storage and use, and turn in the unused portion of the old set. This transition from the old to the new was expected to take less than two months and there were many challenges involved in this transition. A year after the receipt

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9. US Army, "Services Join" in Medical Soldiers Outlook (Vol 2, No 3, Summer 1985): 3.

10. US Army, XVIII Airborne Corps User Initiated Reconfiguration of the Medical Equipment Set Clearing Station (21 December 1984): 1-I-1.

of the new MESs there were medical platoons which had still not completed the turn-in of the old set. In fact, some had still not initiated training on the new set, and a few had not even broken the "bands" on the new MES. This readiness deficiency was tolerated until it came to the attention of the XVIII Airborne Corps Commander.

It was ascertained that the fielding of the MES, Clearing Station could result in the same readiness deficiency. The XVIII Airborne Corps Surgeon formed an "ad hoc" new Medical Materiel Introduction Team. This team consisted of the Corps Surgeon, the three division surgeons of the Corps, the Chief Nurse, 44th Medical Brigade, and the Health Services Logistics Officer from the Corps Surgeon's Office. This team's charter was "to act as the executive committee for the reconfiguration of the two MESs and resolve items of preference and operational concepts that could not be resolved by the units."[11]

A data base was created on a micro computer to assist in the reconfiguration effort. Automating supply information was a necessary capability that none of the units possessed. "It was necessary to print out listings, compile data, and manipulate the data in order to provide draft copies to work groups."[12] This data base provided an "in house"

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11. US Army, "Decision Brief to XVIII Airborne Corps Commander" Subject: Medical Equipment Set, Battalion Aid Station (10 May 84): 7 (Cited hereafter as "Decision Brief").

12. US Army, "Decision Brief" (10 May 1984): 9.

capability to study different configurations of the MES and easily change it to meet the work group and team's requirements.

Two active TOE units were selected based on their commanders willingness to "fix" this discrepancy and the availability of personnel to work on the project. The medical platoon of the 3/8th Field Artillery Battalion, 18th Field Artillery Brigade, and the 36th Medical Company, Clearing, 44th Medical Brigade were selected. Expertise from all three divisions was solicited and received. XVIII Airborne Corps is a contingency Corps and its three divisions are diverse and represent three different type divisions (airborne, air assault, mechanized). Assimilating the recommendations of all three divisions required arbitration, compromise, and confrontation techniques throughout this reconfiguration process.

The reconfiguration effort resulted in the publication of a user initiated reconfiguration listing for each MES. These two volumes culminated the user's best effort to configure the two sets. Regardless, the using units could not have completed this task, as the fielding plan assumed they could. The reconfiguration effort required automated support, liaison visits away from Fort Bragg, eight months of effort, and over forty conferences and meetings to resolve the issues and problems associated with the reconfiguration.

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A Diagnostic Model

As explained in the methodology, the purpose of designing a
model is to develop a meaningful set of relationships among its
variables and to use these relationships to gain insight into the
problem. Commanders, staff officers and action officers must understand
the variables and relationships involved in the change effort. Figure 5
represents the ten functions of change: systems, structure, competency.
resources, culture, strategy, staff, dissemination, leadership, and
advocacy. Planned change must account for these ten functions and
resolve the issues pertaining to each function if the change effort is
to succeed. It is illustrative that many failures in the change process
cannot be criticized in "either their structure or their strategy: the
more likely cause of their inability to achieve set goals lies in one of
the other variables."[13]

The model is predicated on seven ideas: multiplicity of factors,
the complexity of the system, the notion that all variables are
interconnected, that success must be defined, the model's having no

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13. Gordon L. Lippitt, Peter Langseth, and Jack Mossop, Implementing
Organizational Change (1985): 81.

FIGURE 5. THE FUNCTIONS OF CHANGE
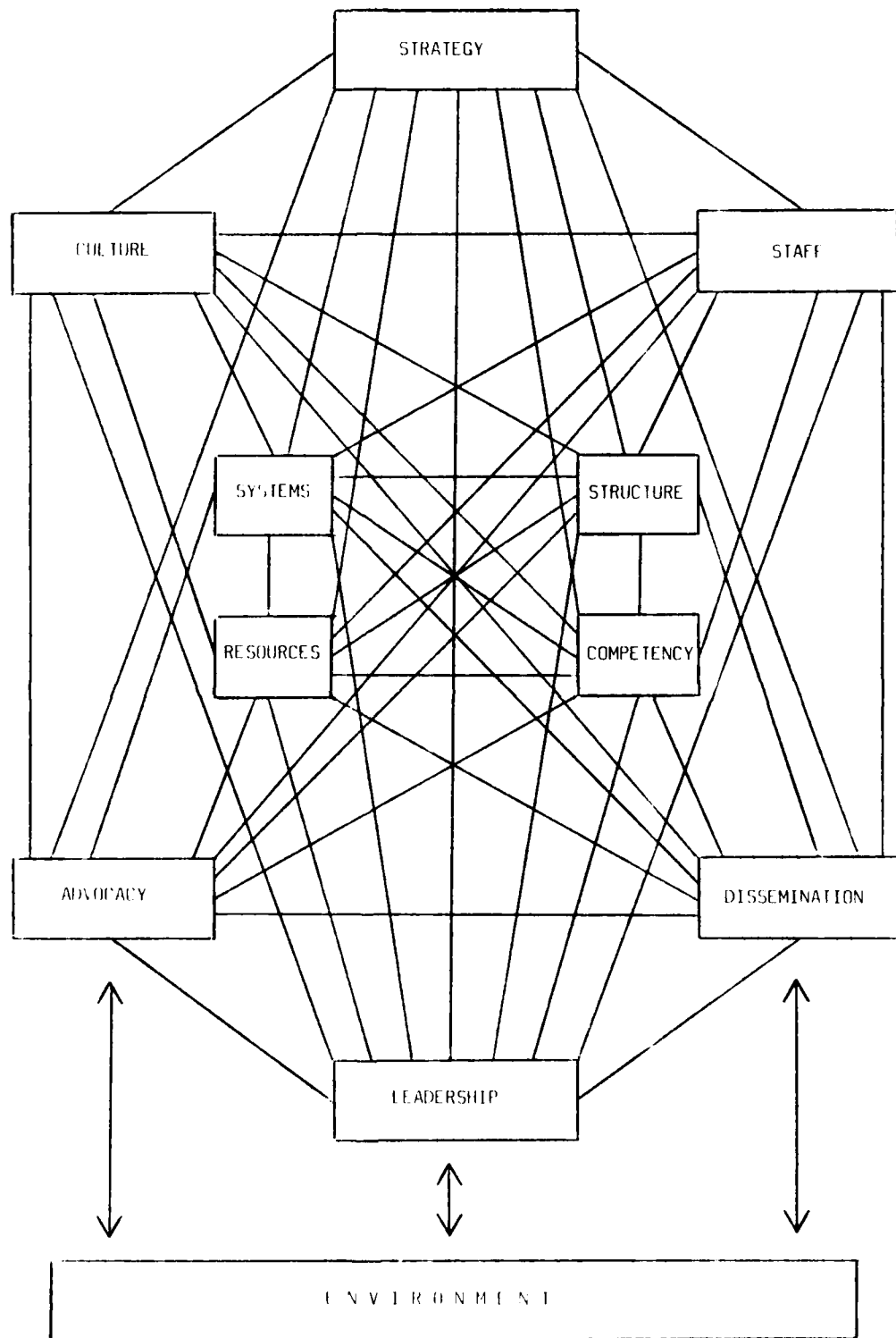
starting gate or implied hierarchy, the mission of the organization
determines each variable, and the environment acts on the organization
with fickle consistency.

The multiplicity of factors is important because managing change
is certainly more than the structure, the system, or the staff. It is a
combination of more factors than are normally addressed. In nine out of
ten failures of thought-to-be-carefully-planned projects, failure was
due to the slighting of one or more of the organizational variables.

The concept acknowledges the sheer complexity of the real
organization. Just as designing a building requires more than the
knowledge of constructing walls, installing plumbing, or making
drawings; changing medical units is not as simple as describing the
change, resourcing the change, and implementing the change. By breaking
the change effort down into manageable functions the military change
agent can examine and determine the best method to approach the
impending change. Each variable must be considered if the change is to
be successfully implemented.

The model also adequately conveys the concept of interconnected
variables. Each variable relates to all the other variables, therefore
changing one changes them all. If the architect does not relate the
windows, roof, and wall designs to the overall design of the building,
he will end up with an unsightly structure. Each component of the

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design should compliment and emphasize the strengths of the other components. This coupling of variables is often overlooked due to time pressures, cost, and the simplistic manners of attempting change. When this occurs the organization may face a difficult transition.

The model is predicated on the definition of success. Success must be carefully defined and the definition disseminated to all members of the organization. This is probably the biggest difference between the Army and a private, for profit firm. In profit motivated firms it is generally understood that the meaning of success is on the income statement, making it easy to define and measure. In a medical unit success requires definition. This definition becomes the reason the change effort is accomplished. The change strategy must include milestone definitions that are measurable, specific and obtainable.

The model also correctly depicts the lack of a starting point or implied hierarchy. This means that any one of the variables, in any combination, and anytime, might be the driving force for the change occurring in the organization. As the organizational change expert, Gordon L. Lippitt points out, "the challenge lies not so much in trying to comprehend all the possible measurements of organization structure as in developing the ability to focus on those measurements that are currently vital to the organization's upward evolution."[14]

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14. Lippitt, Implementing Organizational Change (1985): 80.

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The mission of the organization determines what the organization does. Everything that is accomplished or not accomplished should be related and dictated by the mission. The mission of medical units dictates its structure, its personnel makeup, its styles of management, and its leadership. The mission of the organization determines what is to be done.

The environment determines whether the organization will change. The environmental complexity and degree of uncertainty are particularly important dimensions to assess. There are numerous forces acting on medical units and the environment changes unpredictably. "Uncertain and complex environments place very difficult information processing and decision making demands on the organization."[15] The military change agent must be able to sense change rapidly, bring people who have the latest information together, and make decisions that are responsive to his environment.

The change model is utilized to evaluate three efforts to accomplish planned change in medical units. The level of performance assigned to each example is the opinion of this author. The observations, opinions, and illustrations are based on personal experience, after action reports, interviews, and published sources.

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15. Michael Beer, "A Social System Model for Organization Development" in Thomas G. Cummings, ed., Systems Theory for Organization Development (1980): 82.

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The functions of change are represented by the model and illustrated by the medical SPR, the DEPMEDS initiative, and the fielding of the MES, Clearing Station.

Systems

The military change agent must have a systems perspective. This perspective "covers all the procedures and processes, formal and informal, that make an organization go."[16] It includes the many systems for planning, controlling, documenting, training, etc., that are available within the Army structure. Understanding and fine tuning a system is the least disruptive way to change an organization. The military change agent must have knowledge and understanding of how systems operate and interface with his organization. Although this system perspective is directed, it is often very difficult to achieve.

Virtually every organization can be investigated by three primary systems: the social system, the technical system, and the administrative system. The social system includes the climate, communications network, relationships, style of leadership, decision making methods, values and goals, and the individuals of the organization. The organization develops its own technical system

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16. Lippitt, <u>Implementing Organizational Change</u> (1985): 82.

which becomes "the unique arrangement of equipment, materiel, people,
processes--used to accomplish work."[17] Interwoven within the social and
technical systems is a network of policy, procedure, auditing,
reporting, and formal structure that represents another system. This
administrative system functions in connection with the other two, but
remains somewhat separate. As previously mentioned the Army has the
combat subsystem, the production subsystem and the
integrating/coordinating subsystem. A complete understanding of these
systems is necessary to effect change within the Army.

The medical SPR was adroit in its systems approach. All
relevant systems to the process were effected in a positive manner. A
systems perspective was maintained with no "sacred cows" being left
untouched. The resulting output was a complete relook of the entire
health care system.

The DEPMEDS initiative was practiced in its system utilization.
The designation of the Force Integrator at the Office of the Surgeon
General will facilitate its use of systems. At the time of the test,
many of the organizational systems available were not part of the
DEPMEDS test. The timing of the test and the lack of information
resulted in a practiced performance of available systems.

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17. William G. Dyer, Strategies for Managing Change (1984): 137.

The use of systems in the fielding of the MES, Clearing Station was naive. The requirement that the using unit reconfigure the set forced the XVIII Airborne Corps to "re-invent the wheel" by developing its own reconfiguration methodology, creating its own automated data base, and performing its own testing methods, to enable the user to adapt to the change.

Structure

Structure "in theory, divides functions, delineates pecking order relationships, provides a means of coordination, allows specialization, enforces integration, and perhaps exceedingly important, defines accountability."[18] There is almost universal acceptance of such principles as direct hierarchical relationships (one man/one boss, unity of command), limited span of control, departmentalizing similar activities, balanced workload to staff, etc. Experience has shown that size and complexity are dimensions that become critical in terms of structure.

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18. Lippitt, Implementing Organizational Change (1985): 81.

It seems that a critical problem is that everything becomes important. "The organization gets paralyzed because the structure not only does not make priorities clear, it automatically dilutes priorities."[19] The structure of the organization defines how the military change agent must operate, communicate, resource, and implement the change.

The combat subsystem is organized into functional elements with a specific chain of command. This functional structure provides for specialization and centralization of resources. The medical commander and staff officer in this subsystem must react to a formal chain of command and also to a technical chain of command. The difference between the two is obvious, the command structure provides the formal chain of command and professional expertise provides the technical chain of command. These two structures must be balanced, consulted, and responded to in all change efforts for medical units.

At the production and integrating/coordinating subsystem a matrix type organization becomes necessary. Liaison officers, borrowed expertise and technical advise, and shared resources are common. A more product oriented structure built around activities according to goals,

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19. Thomas J. Peters and Robert H. Waterman, Jr., In Search of Excellence (1982): 307.

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objective and services provided is necessary. Unique project officers
for systems procurement, pooling of technical expertise (as seen in the
medical SPR) and the creation of Organization Teams at the Department of
Army level are required.

The medical SPR effected the structure necessary to accomplish
the objectives. The Commandant of the Academy of Health Sciences was
capable of pooling the technical expertise and subject matter experts to
provide the complete relook of the medical system. Although "ad hoc"
structures were developed, they conformed and supported the objectives
and goals. The efficient, well-defined structure created an opportunity
for exceptional performance and a certain elegance of style. This
adroit structure served as the framework necessary to accomplish the
assigned task.

The DEPMEDS initiative being directed from Congress, and having
an organization team at the Office of the Surgeon General is structured
to ensure that the change effort will occur. The organization team
consists of the organization integrator within OTSG, the standard
requirements code manager, the force integration staff officer, the
TRADOC system staff officer, the Department of the Army system
coordinator, the personnel system staff officer, the Department of the

Army logistics support officer, the TRADOC system manager and the project manager.[20] The organization team focuses on type units not equipment items, and is formed to sustain the required information flow and coordination for the DEPMEDS concept.

The naive assumptions concerning the organizational structure of medical units in the fielding of the MES created many hardships. The fielding plan required the using unit to perform tasks that it was not designed to accomplish. The planning action officers ascertained that it would be a "good training" opportunity for the using unit to reconfigure the set. However, the commanders and staff officers did not implement this change under the "good training" philosophy. The plan had lost its visibility and advocacy. To the commanders and staff officers there were no essential training benefits received by the receiving unit configuring the MES.

Competency

Competency refers "to the expertness and adeptness of the organization itself under the guidance of its managerial leadership."[21] Competency consists of those attributes that characterize an organization, the basic things that it does well. For medical units it

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20. US Army, Army Management (19 August 1985): 3-18.

21. Lippitt, Implementing Organizational Change, (1985): 83.

is providing a total health care system and health care support to the Army in a theater of operation. The competency of an organization can be seen as an intensity of organizational perspective that permits it to maintain an appropriate balance between the other functions of change.

Competency also refers to the military change agent abilities. "One's competency is measured by the degree to which he or she is capable of achieving the intended results."[22] The military change agent must be experienced, knowledgeable, and prepared for the change. He must be competent in his subsystem, within his current structure, and know his organizational culture. He must know the change strategy, the staff he has available (its strengths and its weaknesses), understand his leadership and posses the competency to disseminate information. The military change agent must be the advocate or understand the advocate to the degree that they act in consonance. And finally, the military change agent must be competent enough to disseminate the strategy and implement the change.

The competency function of both the organization and the individuals of the organization allows the organization to accomplish the tasks that it performs and satisfy the needs of its environment and of its personnel. Competency determines the ease with which an organization can function. It establishes whether the individual or organization is sufficient or adequate for the purpose.

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22. Dyer, Strategies for Managing Change (1984): 45.

The medical SPR and DEPMEDS initiative displayed practiced competency in their conduct. The action officers of each example were experienced senior officers that displayed a keen sense of understanding of the variable functions of change. The organizations that handled these examples displayed competency by allowing the necessary interfacing, transactions, information flows and feed back to occur. However, there is also an issue of continued competency. Will these change agents continue to meet their projected schedules? How much influence will external factors have on their change strategy and goals? How does an organization continue to be competent in an ever changing environment?

The fielding of the MES, Clearing Station is an example where both the organization and the commander/staff officers competency could best be described as awkward. Awkward in the sense that actions were uncoordinated, embarrassing, and unpleasant. The organization could not conveniently support the requirements of the fielding plan. The medical units lacked data management, clerical support, technical expertise and other key skills necessary to configure an assemblage that consists of over 400 single line items varing in size and sophistication from an operating room table to a suture needle smaller than a dime. The staff officers failed to maintain the visibility of the system, to articulate the requirements for transportation, to determine storage space and training requirements, and many other issues that were developed as after thoughts to the fielding of the system.

Resources

The ability to obtain and utilize resources is a vital function in the Army. Resources are considered to be people, time, money, information and the equipment required to accomplish the task. As previously stated without resources change will not occur. The commander/staff officer must be cautious about reporting a lack of resources, because with more time one can overcome most of the shortages in other resources.

Time is a resource and a factor in any change effort. One of the naive assumptions that the military change agent may make about change is that it can be effected quickly. By rational planning, a planner may determine that a new action should take 8 hours to accomplish. The amount of actual time spent on accomplishing the task will usually be twice as long, maybe even three times as long as personnel transition. "The reality that change does not come quickly is an essential of any understanding of planned change."[23]

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23. Gordon L. Lippitt, Organization Renewal A Holistic Approach to Organization Development (1982): 59 (Cited hereafter as Organization Renewal).

Time is indeed a precious resource that must be properly utilized. There are many in the Army that assume you can work your staff to the point of exhaustion. It is true that time is an easier resource to utilize and is often taken by the organization as a method to ensure mission accomplishment. If you cannot afford to automate or accomplish the work efficiently, then you can just spend more time and still accomplish the mission. This is a technique frequently used in the military where the culture dictates that the service member has a duty to work 24 hours a day. Even utilizing this technique the reality of not having enough time becomes apparent. "If you can't find time to do it right the first time, where are you going to find the time to do it right the second time?"[24]

A concern in any organization is how to assemble and use information in the organization. A major difficulty is that the required information simply does not move to the people who should get it. Information consists of "qualitative and quantitative, formal and informal, data organized for some useful purpose."[25] The military change agent must be able to acquire the necessary information to resolve issues. The information must then be disseminated and utilized by the organization.

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24. Rusty Bussert and John E. Sullivan, "Reorganizing a Division," Army Organization Effectiveness Journal (Vol 9, No 1, 1985): 70.

25. Kenyon B. DeGreene, The Adaptive Organization Anticipation and Management of Crisis (1982): 65.

People are necessary to accomplish the work. Staff considerations, special skills required, expertise available must be considered early on to enable the organization to pull the required personnel together. The equipment requirement, especially in the medical units is intensive. The organization can easily double, or triple the amount of workload that can be handled by the allocation of more equipment to the same situation. The Army has a specific structure and methodology of acquiring personnel and equipment which the action officer must understand and utilize. The final resource of money requires long lead times and considerable planning. The structure and procedures for acquiring necessary funding must be understood by the military change agent.

The three medical examples were practiced in their ability to obtain and use resources. The medical SPR pooled the subject matter experts and the organizational skills necessary to accomplish the mission. The DEPMEDS initiative expended resources by successfully conducting a field test of the quad service support concept. The fielding of the MES was funded and executed through the PPBES process. It is obvious that without at least a practiced level of performance in obtaining resources a planned change effort will not be successful.

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Organizational Culture

"All organizations depend on the existence of shared meanings
and interpretations of reality, which facilitate coordinated action."[26]
The culture within the context of this model represents the shared
values of the organization. "These are the recognized aspirations and
assigned degrees of excellence, written or unwritten, that go beyond the
conventional, formal statement of organizational objectives."[27] This is
the "common cultural bias"[28] that General Starry refers to as a
necessary ingredient of the change process. In most organizations
shared values are more or less subliminal, but as Thomas J. Peters and
Robert H. Waterman demonstrated shared values are clearly evident in the
regimen of superior organizational performers.

Organizational culture is focused on what may be called the
verbal, behavioral and physical artifacts exhibited by members of an

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26. Warren Bennis and Burt Nanus, Leaders The Strategies for Taking
Charge (1985): 39.

27. Lippitt, Implementing Organizational Change (1985): 80.

28. Donn A. Starry, "To Change an Army," Military Review (March 1983):
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organization. "Verbal artifacts are socially shared language, stories, and myths; behavioral artifacts are found in the organization's rituals, ceremonies, and behavior patterns; and physical artifacts are reflected in the organization's art, physical environment, and technology."[29] These artifacts, the unit shoulder patch, the airborne wings, the expert field medical badge, often have important symbolic meaning for members of the organization. They are "the overt expressions of key perspectives, values, and assumptions."[30] These perspectives, values, and assumptions are important because they define the interpretation of the culture, they represent the beliefs of the culture and demonstrate levels of competency and experience.

Perspectives are those socially shared ideas and actions used by members of an organization to deal with problematic situations. While perspectives prescribe appropriate behavior in a specific situation, values are broader, principles regarding what is right or wrong. Values are the general goals and ideas of the organization. Assumptions refer to those "taken-for-granted beliefs" that are at the core of the organization's culture. For example the perspective of AMEDD personnel is that they must demonstrate patience, caring, and most of all skill

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29. Dyer, Strategies For Managing Change (1984): 154.

30. Dyer, Strategies for Managing Change (1984): 154.

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while treating a wounded soldier. The value in this situation is that by treating wounded men morale is favorably affected, and soldiers can be returned to the battle, enhancing mission accomplishment. The assumption is that human life is a limited, valuable resource.

"When one talks of a corporation's culture, one means that complex, interrelated whole of standardized, institutionalized, habitual behavior that characterizes that firm, and only that firm."[31] The culture of the Army is different in several ways from its civilian counterparts. The key difference is perhaps best expressed in the single word "duty". For "duty" is the manner in which the job is approached. The time spent at work and the risk faced are different in the Army except for the highest levels of management in the civilian management structure. The service member is trained to approach his job from the attitude that he will never possess total authority for the military power at his disposal. The President and Congress control the use of military power. The military officer works "24 hours a day" and many are devoted to this selfless service. All military professionals realize that one day they may be asked to sacrifice their life for the good of their organization.

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31. James O'Toole, Vanguard Management Redesigning The Corporate Future (1985): 275.

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The recognition of organizational culture was adroit in the
conduct of the medical SPR. Subject matter experts were asked in a
non-attribution environment for their assistance. The group culture was
capitalized to produce high quality work in a relatively short period of
time. Cultural values, norms, perspectives, and assumptions were taken
into account by recognition, agreement and arbitration.

The recognition of organizational culture is best described as
naive in the DEPMEDS example. The lack of doctrinal preparation, a
clearly defined purpose, and the lack of a convincing advocate to
accomplish the change resulted in the participant's cultural resistance
and denial being expressed. DEPMEDS was presented as a constraint, a
necessary evil forced on the Army by Congress. It lacked advocacy and
presented to most participants the distasteful appearance of the
bureaucracy throwing money at a problem. It did not answer the needs of
many of the participants and went against their culture by forcing
compromise on systems that many valued as requiring unique solutions.

The recognition of the organizational culture in the fielding of
the MES can be described as awkward. The assumptions that the culture
of the medical platoon or clearing company could support a
reconfiguration effort without assistance was incorrect. The men and
leaders at this level are mostly junior in rank and inexperienced in
military operations. They rely heavily on regulations and procedures to
implement their day to day activities. The "system" instructing them to

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configure the set to meet current requirements confused and upset them.

Traditionally, they had never been required to have detailed

intelligence about their impending missions. When they were told to

deploy, they deployed with everything, their entire TOE, because that

was the requirement in their "mind set." With the new MES, they were no

longer capable of deploying with everything and were told to decide what

to take and what to leave. This situation represented a system

discrepancy. On most actual deployments soldiers and leaders did not

obtain the intelligence for the operation until after the deployment had

begun, too late to decide what to take. By awkward recognition of the

culture of the units involved, and the assumptions made in the fielding

plan of the MES; commanders and staff officers were placed in a

situation of making decisions without the proper information and without

doctrinal guidance.

Strategy

"Strategy is the art of devising and employing plans that

respond to and counterbalance changes in the internal and external

environment."[32]   It sets the objectives, provides the road map, and

accounts for the other nine functions of the change process. It

includes specific and measurable goals, subgoals, and milestones. The

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32. Lippitt, Implementing Organizational Change (1985): 81.

change strategy is the plan for accomplishing the change. It is by nature a long term plan. As implementation of the change effort enters the near term time frame, the medical unit must take the long term change strategy and update, revise, resolve and prepare for forceful implementation of its own plan. The long term plan should resolve most questions and with the proper interfacing between subsystems the change strategy should be implemented efficiently.

However, "the mere existence of a pristine corporate strategy does not ensure excellent execution."[33] The road is littered with excellent plans that were failures in execution. Military change agents must be aware that a good plan is necessary, but it does not ensure success. He must be "aware that plans are not results and policy statements alone do not assure quality."[34]

The strategy of the medical SPR was dictated by the AR 11-4 and further defined by the Commandant, AHS. The adept strategy of the medical SPR effected a workable plan. The strategy was formally established, milestones were met, success was evaluated, and some 79 issues were tracked. Other variables of the model were organized and staff responsibilities were directed.

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33. Lippitt, Implementing Organizational Change (1985): 81.

34. William Mayer, "New Direction for Military Medicine - The Program," Defense 85 (December 1985): 30.

The strategy of DEPMEDS is to effect the change by restricting the procurement of future field hospital systems to central management. It is a practiced strategy, but it may not be successful due to differing service requirements and exigencies of time. It is a successful strategy in the sense that the strategy is following procedures and trusts that the desired results will follow.

Finally, the strategy of the MES, Clearing Station was flawed by the assumption that medical units had the time, capability, and resources to accomplish the reconfiguration. It was forgotten that medical units have real world support mission, Troop Medical Clinics (TMCs) to operate, as well as maintaining their current MES. The strategy was to have the using unit reconfigure the set for use. The XVIII Airborne Corps Surgeon likened this strategy to shipping the M1 tank to an armor unit in pieces and telling them to put it together. This strategy proved to be awkward. The interesting but disturbing fact is that the fielding plan was staffed, and two years prior to the plan "everyone" agreed to the change strategy.

Staff

The staff must be considered in the change process. Continuity, teamwork, and organizational expertise must be maintained throughout the change process. The military change agent must consider the competency, willingness and availability of his staff and develop a strategy consistent with the staff.

"Human resources should be reviewed for upgrading, succession and career planning at each level of the organization."[35] The military change agent must continually assess his staff. Change requires good staff work. The staff must spend sufficient time planning, directing, and working on the change effort. The staff must "be persistent, maintain realistic objectives, ask for more than they expect, embellish the objective and maintain low visibility."[36] The organization through its staff must display enough tenacity to see the change effort through to completion.

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35. Lippitt, Implementing Organizational Change (1985): 84.

36. Herbert Harvey Hyman, Implementing Institutional Objectives a Guide for Hospital Planners (1984): 17.

The staff performs "two interrelated functions: first, the maintenance function--achieving viable continuity--and second, the task function--achieving an assigned or chosen goal."[37] The two functions are how work is accomplished within an organization. The teamwork engendered in the staff, and the ability of it to accomplish its tasks will determine the success of the change effort. The trust that the staff develops as it works toward a common goal is reciprocal and reduces the amount of time necessary to accomplish work.

A particular challenge in Medical units and throughout the Army is the continuity of the staff. Complex transitions are almost assuredly doomed to fail if the planners and implementors are not the same staff. This does not mean that the different subsystems of the Army must implement the change they produce for the combat subsystem. It requires that the combat subsystem accomplish its own planning and allows time for the implementation of the change effort. "It is difficult and sometimes frustrating to grasp all that was happening in action officer detail. This situation occurred despite the wealth of information in office files."[38]

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37. Lippitt, Organization Renewal (1982): 199.

38. Rusty Bussert and John E. Sullivan, "Reorganizing a Division," Army Organizational Effectiveness Journal (Vol 9, No 1, 1985): 70.

The staffing of the medical SPR can best be described as practiced. The constraints of time, the necessity to change quickly, the requirement to devote their complete effort to the action, caused what can be described as "burn out" even among bonafide experts and dedicated advocates. The medical SPR brought together in a exceptional experience many technical, professional, highly-skilled, and subject matter experts and gave them an opportunity in a non attributional setting to relook the medical support system.

The DEPMEDS initiative is described as being naive due to its lack of prior information, its lack of consensus, and its lack of vision. The frame of reference for the participants was not well established and their initial reaction was poor. A joint venture must by necessity accommodate the majority, but with good staffing it can result in satisfactory products for all services.

The staffing for the fielding of the MES was naive as the receiving units attempted to do their best with what they were sent. It was naive in the sense that personnel lacked essential capabilities to configure the set. Few if any had experience in the fielding of equipment. It was necessary to teach the staff the procedure to enable them to accomplish the reconfiguration.

Dissemination

Dissemination is the ability of the organization to communicate
the information that is necessary for the change effort. It starts with
simple interpersonal communications but encompasses the organizational
interfaces, the reports, the inspections, and the training exercises of
the units. This function is often not considered and leads to large
problems when trying to effect change.

Interfacting implies a relationship between people, machines,
and organizations to enable individuals, groups, and organizations to
handle the large amount of information for appropriate action taking.
Such a process should lead to congruency and credibility as it seeks
common attitudes, skills, and problem resolutions. The military change
agent must deal with many interdependent relationships. He is linked to
diverse people, groups, and organizations that have the power to
influence his job performance.

"Effectively dealing with those outside one's chain of command
means being able to overcome a lot of resistance and gain cooperation
without formal authority."[39] The military change agent must identify
where all the relevant lateral relationships exist. He must then assess

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39. John P. Kotter, Power and Influence (1985): 42.

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each relevant actor to determine who may resist the change effort, why, and how intense the resistance may be. The military change agent, whenever possible, must develop a good relationship with the relevant actors to facilitate communication, education, and problem solving. He must carefully select and implement subtle and forceful methods to deal with the resistance that is not resolved by good relations.

Change requires communication. "Communication is the very essance of all organizations for without the sharing of information, an organization could not be formed or survive for very long."[40] In attempting to understand organizational communications, there appears to be four sublevels of communication: formal, work related, informal, and external. "Informal communications, including the grapevine, usually has a two-way component."[41] Generally, the other sublevels of communication take place in a downward manner and experience specific filters. Horizontal communications and interfacing are informal communications that are utilized to disseminate information and resolve problems. All four sublevels of communications should be used in the change effort whenever possible.

The Medical SPR was adroit in its ability to disseminate information. Articles in professional journals, DOD publications, command information briefings, direct correspondence, and other methods

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40. Bennett, Improving Management Performance (1978): 54.

41. Lippitt, Organization Renewal (1982): 99.

were utilized in disseminating information concerning the medical SPR. All four sublevels of communications have been utilized to disseminate information and build advocacy for this change effort.

The DEPMEDS initiative and the fielding of the MESs were both naive in their ability to disseminate information on the change effort. The resistance from the subject matter experts in the DEPMEDS test was caused by a lack of understanding created by information shortfalls. A large amount of information on the configuration of the MESs was available at the Academy of Health Sciences, however it took "superhuman" efforts to get the information in the hands of the users. One example, was the configuration of the surgical instruments for the clearing station, which was developed at the Academy but not disseminated to the using unit.

Leadership

Leadership in a change effort "is the art of indirect influence and the skill of pulling units and soldiers together in a positive, action-oriented manner to create the conditions for success."[42] In a

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42. US Army, FC 22-999, Leadership and Command at Senior Levels (15 November 1985): 1-3.

unit it is the characteristic style of performance that the unit achieves. It is akin to saying the right words at the proper time, doing everything that is necessary, but never seeming to do anything.

A leader must be able to conceptualize the situation. He must develop the situation and come to a timely decision. Decision making is perhaps the most difficult skill to learn. At some point, it is time to stop analyzing information and make the decision from the know facts not all of which will be apparent. The ability to conceptualize the future is an imperative not solely to predict the outcome of the decision, but more importantly to know what decisions need to be made and when the decision needs to be made.

The leader must also be able to shape the situation by his guidance, influence, and power in order to create the environment for high performance. He must be imaginative and innovative in his approach to problems and handling data. Competency provides the capability to know what is important and what is not. It establishes the leader's credibility. The leader must know the context of the situation and be able to link it to the vision he has established for the organization. He must view the organization from its entirety. A leader must possess

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both physical and mental endurance. "Only with endurance can a leader or commander maintain his patience, humor, and perspective while sharing the hardships and frustrations of his units and soldiers."$\frac{43}{}$

The act of balancing contradicting forces is one of the most important aspects of transformative leadership. Leadership must quickly sift through the options and the contradictions, decide on the course of action and then implement it. There appears to be five such balancing acts that go on constantly in most organizations. Structure provides the environment while it hampers flexibility. Policy provides direction while it may kill imagination. Rules ensure standardization and predictability but stifle innovation. Procedures allow for the day to day accomplishment of tasks while they may kill the initiative to try something new. Dispersion is necessary to survival but makes it difficult to get the organization to act in unity. Leadership is finding the appropriate mixture/balance between these competing, and contradicting forces.

A leader must be able to synthesize the vast amount of data into useable information. This is a difficult task in that there is simply too much information available, literally hundreds of systems to provide answers. A leader must analyze and isolate essential information and display the maturity to allow interesting non-essential data to elapse. A leader must demonstrate a practical, knowledgable judgement in

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43. US Army, FC 22-999 (15 November 1985): 4-15.

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synthesizing data into useable information. This ability to
conceptualize the available information in order to define the
organization or situation and develop a vision for the organization is
the first requirement of the leader. The leader must set the goal and
objective for his organization. He must know where the organization is
going. It is a necessity to have a vision in order to achieve the
organizational mission.

Secondly, the leader must be capable of making a decision, an
educated decision based on the best information available at the time.
Decision making is not an easy process. It is a deliberate, procedure
which selects the best course of action. It establishes accountability
and responsibility for the actions that are accomplished. The leader's
decisions inspire the organization into action. The successful leader
is timely, clear, and consistent in his decision making.

Thirdly, the leader must have the tenacity and endurance to
implement his decision. He must possess the endurance to suffer the
good and the bad with the unit. A leader must be able to maintain his
perspective above the details of the situation. This takes patience,
physical fitness, mental stamina, and the deep belief that the
environment established by the leader is correct. It is the tenacity to
get the mission accomplished. The leader must display an innovative,
driving, intensity to complete the job, no matter what the situation.
Simply stated the leader establishes an environment of achievement where
failure is a result that is simply not considered.

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Fourthly, the leader must be able to communicate his decisions, goals, objectives, and vision of where the unit should be. A leader who cannot communicate his intent will ultimately fail. Interpersonal communication is a major attribute of the leader, but the leader must broaden his communication skills. He needs to be able to communicate through people and this two way process involves careful listening. Communication skills are the way in which a leader demonstrates his ability to conceptually and competently handle issues. Communication skills are the primary means through which the leader demonstrates he cares. Through his presence, tenacity, and communication skills, he demonstrates solidarity with the organization. Leaders must clearly understand themselves, have a good grasp of the situation, and genuinely put the goals and objectives of the organization before their own needs.

Fifthly, a leader creates power. This power is not the physical, punitive power of brute force, but the power created by an honest, reciprocating currency of leadership. It is the competency that is gained from the organization when you can predict their reaction, know their capacity, and expect them to perform well. It is the

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power created by the leader through his vision, through his demonstrated caring, and through his competency. Leadership is "the capacity to translate intentions into reality and sustain it. Leadership is the wise use of this power."[44] Leadership is the ability to create an environment that will allow subordinates to reach their potential.

Finally, these leadership skills and attributes must be "integrated with a sound ethical and moral base."[45] Above all the leader must be committed to the Army's professional ethics, values, and culture. This is generally accepted to mean loyalty to the nation, loyalty to the unit, selfless service, and personal responsibility for one's actions. He must be competent, and possess integrity, courage and candor. Possessing or being these things establishes the leader's reference point as well as setting an excellent example for others to follow.

The skills required for leadership are many. They vary with the situation, and the leader must be able to adapt his leadership style to the situation. One must have the conceptual ability to analyze the situation, make a decision, and the intuition to sense how the organization is doing. The leader must possess the competency to persuade people to accept educated risks and to do things that they may not have the desire to do. He must be able to articulate the

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44. Bennis, Leaders The Strategies For Taking Charge (1985): 17.

45. US Army, FC 22-999 (15 November 1985): 4-27.

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requirements of his organization and strategy while he must be able to teach, mentor, and counsel his subordinates. Leaders must have the ability to mold, train, and lead soldiers and units effectively from a sound moral and ethical basis.

Having attempted to describe what leadership is, one must be reminded that "the art of leadership is only complicated to the theorists, it is not complicated to practical men."[46] This is perhaps an over simplification, but it does bring us back to reality and the problems involved in discussing this function. There is a profound difference in the managing of change and in the leadership of change. This distinction is crucial. "Managers are people who do things right and leaders are people who do the right thing."[47] The difference may be summarized as activities which create effectiveness (vision, power, ethics, communication, commitment, etc.) compared to activities which create efficiency (mastering routines, establishing regulations, over structuring the situation, etc.). The quest in leadership is to "know-why" the unit must change before "knowing-how".

Adept leadership was applied in all three medical examples. Throughout the conduct of the medical SPR many participants displayed the necessary leadership which created a "win/win" situation. With the

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46. Bruce C. Clark, "Leadership - Commandership - Generalship - Followship," Armor, The Magazine of Mobile Warfare (Vol XCIV, No 3, May-June 1985): 44.

47. Bennis, Leaders The Strategies For Taking Charge (1985): 21.

DEPMEDS initiative the organization again demonstrated effective
leadership by creating an environment (vision) in which the initiative
will succeed. The fielding of the MES was only accomplished by the
leadership displayed by the leaders of the receiving medical units,
supporting staffs, and the supporting nature of the senior levels of
leadership involved in this transition.

Advocacy

"Advocacy is the first step toward change."$\frac{48}{}$ There needs to be
a leader that advocates the change and that will persevere in securing
such a change. In the Army change must have a clear advocate. The
advocate can be a person, a group, or an organization that will support,
struggle, and fight for the change. The necessity of the advocate is
demonstrated by the reality that good ideas are not adopted
automatically. They must be driven into practice with courage and
patience.

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48. Lippitt, Organization Renewal (1982): 59.

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The advocate must have a selfless desire to achieve the change effort. "What matters is the idea, and since the idea comes from within rather than without, there is constant energy to guide and fuel the effort."[49] The advocate must collect raw data, analyze the data, and reach a conclusion. "Instead of calling his conclusion a prediction, he calls it a project and makes it happen."[50] He creates the future by his dedication to his vision of what the future should look like. The advocate's methods are often harsh and even cruel. In place of empathy and understanding he may rely on fear, intimidation, and the threat of public humiliation. These are not recommended methods for advocating change, but they do in fact work.

The advocate is the champion of the cause. The leadership may be directed by or may have to seek out the advocate of the change effort. "The unwavering support throughout the Army, Defense Department and Congress for the weapon"[51] is one factor that was repeatedly cited as a major reason for the MLRS success. In the absences of the profit

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49. Warren J. Keegan, Judgements, Choices, and Decisions Effective Management Through Self-Knowledge (1984): 99. (Cited hereafter as Judgements, Choices and Decisions.

50. Keegan, Judgements, Choices, and Decisions (1984): 99.

51. Jerry Stilkind, "MLRS Stands Out as a Procurement Success," Army Times (25 November 1985): 53.

motive to guide a change effort, the advocate provides the

organizational support to ensures that necessary resources are

available. The change effort will not survive without advocacy.

The advocate for the medical SPR was the Commandant of the

Academy of Health Sciences. The Congress of the United States was the

advocate for the DEPMEDS initiative. With two such powerful advocates

there was little doubt that the two change efforts would occur.

Advocacy in the fielding of the MES was awkward. The fielding

plan of the medical equipment set, clearing station had lost its

visibility. The readiness shortfall of the medical platoons had been

reported through supply channels. Unit leaders had asked for assistance

from US Army Medical Materiel Agency (USAMMA), the Academy, the Corps

Force Integrator, and were told to read the fielding plan. Being unable

to configure the set, the readiness shortfall was left to languish until

the Corps Commander, through Commander's conferences, became aware of

the shortfall. Thus, the Surgeon's Office of the XVIII Airborne Corps

became the advocate of the MES fielding for Fort Bragg.

TABLE 3.   TABULATION OF EXAMPLES

	Medical SPR Integrating Subsystem	DEPMEDS Production Subsystem	Fielding MES Combat Subsystem
Systems	adroit	practiced	naive
Structure	adroit	adroit	naive
Competency	practiced	practiced	awkward
Resources	practiced	practiced	practiced
Culture	adroit	naive	awkward
Strategy	adroit	practiced	awkward
Staff	practiced	naive	naive
Dissemination	adroit	naive	naive
Leadership	adroit	adroit	adroit
Advocacy	adroit	adroit	awkward

The Comparison

The three change situations affecting medical units have been described.   Table 3 summarizes the functions and the varying degrees of accomplishment that have been described.   This summary illustrates the level of performance that was acheived by the particular change function.   The table demonstrates the use of the model.

The adjectives; adroit, practiced, naive, and awkward are used to describe the level of performance that was obtained for each change function and as a rating scheme in the respective order. Adroit connotates skillful and adept performance under pressing conditions, the performance was effected, well done in a smooth polished manner. Practiced connotates proficient and skilled performance. Performance by following procedures and trusting that desired results will follow. Naive connotates that the performance was lacking a critical capability, skill or analytical insight. Awkward connotates that the performance was uncoordinated, embarrassing, unpleasant, and caused inconvenience for those units involved.

The model is a diagnostic tool that enables the military change agent to conceptually picture his unit and isolate those change functions that he can enfluence. In any change effort, the military change agent must resolve issues concerning the ten functions of change. The model demonstrates the multiplicity of the functions and how each function relates with all the other functions. These relationships create a complex system of interaction in the organization when introducing change. It is important to understand that all the functions have the same relative importance. If one function is awkwardly or naively performed then the entire change effort will suffer. The model must be approached with the mission and environmental

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factors of the unit firmly understood. The success of the change effort must be defined for the organization and should be disseminated and congruency obtained by all that are involved in the change effort.

Dissemination, leadership and advocacy are how medical units interact with their environment. The medical units environment determines what change will occur. The advocacy of the change effort will determine the organizational support for the change. Getting information to those who need it and communicating the change is vital. The dissemination of information must occur, not only internally within the organization but also externally with its environment. It is through the leadership that the environment is interperted and change is effected. The medical unit dissemination techniques, leadership, and change advocacy establishes how the change effort impacts on the unit.

In attempting to determine the level of achievement in a change effort, the military change agent can isolate the functions that are being satisfactorily managed at the particular time and those that require attention. The use of particular terms to evaluate the change functions is not significant. Consideration and resolution of issues relating to the ten functions of change is the imperative.

CHAPTER 6

In fact, people like change. What they resist are the methods
that are used to put changes into effect.

--Gordon L. Lippitt, Organization Renewal

Change from Different Perspectives

What we define as change depends initially on which perspective
we take. Acting as a member of the group being affected, the military
change agent who is deliberately forcing the change, a member of the
group who is not affected but is observing, or an outsider
reconstructing events we will all take a different perspective of how
the change is defined. "Depending on how a given set of events affect
us, and depending on whether we take a short range or long range time
perspective, we will see either change or continuity."$^{\underline{1}}$

What we define as change depends on immediate effects and what
we expect or hope for. Perception of change also may depend on one's
time horizon. Whether one describes something as having an impact or

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1. Edgar H. Schein, Organizational Culture and Leadership (1985): 298.

not may depend on one's goal. The goal of having the medical equipment set (MES), clearing station fielded was of such priority that the change and impact it would create at the unit level was not seriously considered by the decision makers.

"When we are dealing with social systems there is no such thing as spontaneous change or mutation."[2] There is always someone inside or outside the system who has a motive to make something happen. "The actual outcome may be a complex interaction of the forces unleashed by the different intentions of different actors, but the outcome will never be random and unpredictable."[3] The difficulty may be that events and interactions are so complex that it is not practical to try and unravel them. Events are usually over determined; that is, so many forces may push an event in a given direction that it may not be sound to offer a single explanation. It is often extremely difficult and controversial to unravel the iterations and formulate a precise set of causes.

"All change then is motivated. However, many changes do not go in the direction that the motivating persons wanted them to go."[4] In other words, much of what actually happens as a consequence of initial

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2. Schein, Organizational Culture and Leadership (1985): 299.

3. Schein, Organizational Culture and Leadership (1985): 299.

4. Schein, Organizational Culture and Leadership (1985): 300.

change efforts may be unplanned and unintended. "A major obstacle to translating one's intention into an effective strategy and thus achieving the desired impact is the lack of feedback as to actual results."[5] The change agent may have miscalculated the effects of their actions or may have been unaware of other forces that were simultaneously acting.

An Aid Bag

It is not so obvious but is apparent that decisions on change carry a great risk. That is to say once they are made, they are not easily corrected, modified, or reversed. It is a little understood fact that the parts of a system lose their distenction as they flow through the system. *Management cannot directly track the effects and causes,* the responses, and the complete actions that result from their decision. They are forced to rely on feedback that they receive. Feedback is the measurement of results on the other end of the process that reinforces their decision or requires more change.

The purpose of this thesis was to determine how to manage the near term functions of change in medical units. First, it was necessary to identify and describe the functions of change. Once the functions of change were identified the management skills necessary to facilitate

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5. William G. Dyer, Strategies for Managing Change (1984): 47.

change became apparent. There are no simple answers. There are no short cuts. The commanders, staff officers and action officers must "seek simplicity and then distrust it."[6]

The military change agent must possess a systems perspective, knowledge of the change effort and the competency necessary to plan, implement, and critique the change. He must know his current structure and be able to predict the required structure for the change effort. The military change agent must be able to obtain the necessary resources of time, money, personnel, equipment and information for the change effort. "The movement toward the final goal is a sequential process that requires a number of subgoals."[7] This creates the need for queuing information and the development of an overall change strategy that reduces the implementation into discrete tasks.

In a systems model, a change effort is initiated when the system is in disequilibrium. "There is a need to recognize that change always involves a process of confronting needs."[8] Such confrontation will involve all ten functions of change. The need is for planned change to be a process of confronting reality. This need must be combined with

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6. Warren Bennis and Burt Nanus, Leaders The Strategies for Taking Charge (1985): 10.

7. Gordon L. Lippitt, Organization Renewal A Holistic Approach to Organization Development (1982): 73 (Cited hereafter as Organization Renewal.

8. Lippitt, Organization Renewal (1982): 54.

adaptive and coping behaviors that tend to eliminate the extremes of
pleasantry and pain. "Anyone concerned with influencing others to make
changes in their performance or behavior must take into account the
impact he or she is having on others, particularly those asked to make a
change."[9]

Generally changes imply uncertainty about our future role, and
our behavior in that role. The concept of change is feared because it
upsets the way of doing things and threatens security. The military
change agent must counter this feeling with the expressed desire for new
experience, the benefits that can be derived from the change, and the
chance of success contained in the change effort. Interfacing for
effective communications is essential to the change effort.
"Communication goes beyond information exchange. It involves the
dynamics of dialogue that embodies confrontation, search, and
coping."[10]

"Confrontation implies a facing up to the tangled web of
relationships, issues, problems, challenges, values and potentialities
that invariably hang like a curtain between the"[11] components of the
organization. The military change agent needs to be aware and prepared
for the responses to the change. Individuals respond to planned change

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9. Dyer, Strategies For Managing Change (1984): 45.

10. Lippitt, Organization Renewal (1982): 107.

11. Lippitt, Organization Renewal (1982): 55.

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through stages of shock, disbelief, guilt, projection, rationalization, integration, and hopefully acceptance. These stages are very similar to the stages of accepting the death of a loved one. An analogy can be made that as individuals work in an organization, they humanize it, and when forced to change it, go through a grieving process. The military change agent should anticipate these feelings, minimize them, and assist the personnel through the stages.

The action officer must have an understanding of the organizational culture that he is trying to change. In accordance with this understanding, he must develop his strategy to implement the change with specific goals, incrementally phasing and appropriate involvement from the combat subsystem. The action officer must ensure the dissemination of doctrinal changes.

Commanders and staff officers who are responsible for stimulating and implementing change have a variety of methods available to them. The choice of method depends upon a diagnosis of the possible sources of resistance, the relative importance of resistant acts, the ways in which resistance can be reduced, the time available, and the implementing instructions received.

It is vital that leadership be displayed throughout the transition in order that decisions are made intelligently, timely, and to meet the perceived needs of both the organization and the personnel of the organization. The leadership must be in consonance with an

advocate. It is not necessary that the advocate be the leader, but the leader must support the advocate. The advocate through commitment to the cause demonstrates and convinces peers, supervisors, and subordinates of the value of the change. The commander, staff officer and action officer needs to be able to disseminate strategy for the change, implementation instructions, and feedback on the change to his subordinates and superiors.

It is necessary not only to understand change but be able to manage, implement and critique change. This handling of change must begin with a diagnosis of the current situation. The ten functions of change must be studied, resources obtained, and issues resolved. Individuals involved in the implementation should be involved in the planning of change as much as possible within the medical unit. Accurate and complete information must be disseminated to the organization and its environment. Staffing of issues must provide opportunities for the resolution of issues both vertically and horizontally within the organization. The organizational culture, norms, habits, verbal skills, must be taken into account. Only essential changes worthy of the effort and expense should be undertaken. Adequate motivation must be given to change efforts. Problem solving must be engendered at the lowest level and allowed to be part of the change effort.

Conclusions

"The history of Army reorganizations suggests that the impetus
for change comes from two main sources: the leadership of the Army
(primarily the Chief of Staff/Vice Chief of Staff) and from outside the
Army (since 1947, the Secretary of Defense)."[12]

Normally, the impetus for change does not come from within the
Army for several reasons. First,"no group other than the top leadership
is exposed to the feedback on performance of the really significant
tasks of the Army."[13] Secondly, "large parts of the Army
organizational system have a sizable stake in maintaining the status
quo."[14] The only certainty about reorganization and change is that it
will create upheavals, dislocations, and realignment of tasks which are
all very disruptive to an organization.

Dissatisfaction with the status quo usually builds in intensity
over several years until it reaches the point where action must be taken
to review and analyze the need for change. The Army leadership commits
itself to change and employs an organizational element to accomplish the

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12. US Army, Army Command and Management: Theory and Practice (19 August
1985): 8-7 (Cited hereafter as Army Management).

13. US Army, Army Management (19 August 1985): 8-7.

14. US Army, Army Management (19 August 1985): 8-7.

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proposed development task. Change within the Army is a dynamic, complex process that requires a large expenditure of resources. It must be carefully planned and forcefully executed. Technology forces change in our environment. In a never ending cycle, technology increases the speed of change and knowledge increases the application of the technological change.

The force modernization effort needs to be based on doctrine. Changes for medical units should be required to comply with the current concept guidance. Equipment changes, training changes and structure changes must be supported by doctrine.

"The transition from new old to new requires careful timing and planning. It is a time of extra effort, frustration, and stress. During this time managers need to remain attentive to individuals and to provide reinforcement and support."[15] Change is enhanced by simplicity, its consistency with the existing values, the prestige of the advocate, the timing of the change, the close integration of technical services for the transition, and continuing reinforcement from the chain of command.

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15. Bob Goodfellow, "The Evolution and Management of Change in Large Organizations", Army Organizational Effectiveness Journal (Vol 9, No 1, 1985): 28 (Cited hereafter as "EMCLO" in AOE Journal).

Recommendations

The management skills recommended in this study should be demonstrated by commanders, staff officers, action officers and leaders. It is the job of all leaders to sensitize their staff, workers, or work units to the impending change. The following specific recommendations are made:

a. For the Army as a system:

(1) The Army must strive to keep up with the threats application of technology. Continued work in the Concept Based Requirements System, the various intelligence networks, Mission Area Analysis, and Battlefield Development Plans is necessary to maintain an ever changing force. The Army must maintain a keen interest in technology to ensure its survival on the modern battlefield.

(2) The Army must train as it will fight. Its officers must understand that training is a full time job. Training is an effective method of changing an organization.

(3) The Doctrine of the Army must provide the reason for the structure, the equipment, and the personnel requirements. Doctrine should set the requirements.

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(4) The Army must develop its officer corps to be capable of handling change. It seems incongruent that at time of enormous change within the Army, the Army abolishes its organizational effectiveness school.

b. The Army Medical Department (AMEDD) as the production and integrating/coordinating subsystem:

(1) The AMEDD must shape and fashion change to create the most effective and efficient health service support.

(a) It must conduct detailed long range planning, establish capability objectives, and incrementally implement technological change.

(b) It must disseminate information on the necessity of change, and the plans for achieving change. Information should be available to all three subsystems of the Army. Horizontal communications and interfacing must be improved.

(c) It must be the advocate for change. If the AMEDD does not act as its own advocate, then surely, it will be changed by someone else.

(2) The AMEDD must remain subordinate to the Army
and act in consonance with it. It cannot become a quad service activity
and still support the Army at the combat subsystem level. For service
support above Corps level a quad service medical support system may be
appropriate. This area merits further research.

(3) The AMEDD must develop its officers to handle
the change as it is relevant to providing health service support.

(a) Commanders and staff officers require
implementation skills, decision making skills and interpersonal
communication skills. They must possess a systems perspective broad
enough to understand the interfacing and coordination required.

(b) Action officers in the production and
integrating/coordinating system require technical expertise, holistic
management practices, and the communication skills to interface between
the three subsystems.

(4) The AMEDD needs to establish a central long term
planning agency that can develop, provide, and advocate change within
the service. The "ad hoc" assistant commandant's position is sufficient
but more study needs to be conducted to ensure that this is the optimal
method of keeping change visible to the decision makers. Further study
is required to determine the optimal structure to handle this task.

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(5) The AMEDD needs to develop training and educational packages on the interface between the three subsystems of the Army, the tasks of each, and the delineation of responsibility within these subsystems. The training packages should orient on the coordination necessary within each subsystem of the Army, how it relates to mission accomplishment, and the level of proficiency required for each subsystem.

c. The Medical units as the combat subsystem:

(1) Commanders and staff officers need to develop skills necessary to handle change.

(2) Each unit and parent unit needs to develop long term implementation plans with milestones to track, reflect, and maintain status of changes, proposed changes, and ideas affecting their unit.

(3) Each unit needs to monitor its ability to change, adapt, and cope with its environment. The diagnostic model presented is one technique.

The science of managing the near term functions of change in medical units is the skills and learned abilities of the leaders to forecast, diagnosis, plan, organize, direct, coordinate, resource, control, implement, and critique the change. The art of managing the near functions of change is the ability to sensitize the information, demonstrate the skills, and accomplish the change.

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APPENDIX A

ACRONYMS

- A -

ABE	Army Budget Estimate
AG	Army Guidance
AHS	Academy of Health Sciences, US Army
AMDTC . . .	Army Medical Department Technical Committee
AMEDD . . .	Army Medical Department
AMT	Army Modernization Training
AR	Army Regulation
ARSTAF . . .	Army Staff
ARTEP . . .	Army Training Evaluation Program
ASL	Authorized Stockage List

- B -

BDP	Battlefield Development Plan
BOIP. . . .	Basis of Issue Plan

- C -

CBRS . . .	Concept-Based Requirements System
CE	Concept Exploration
CG	Commanding General
COB	Command Operating Budget
CONUS . . .	Continental United States
CTP	Coordinated Test Program
CTU	Consolidated Table of Organization and Equipment Update

- D -

DA	Department of the Army
DARCOM . . .	US Army Materiel Development and Readiness Command
DEPMEDS. . .	Deployable Medical System
DET	Displaced Equipment Training
DG	Defense Guidance
DMSB. . . .	Department of Defense Medical Standardization Board
DOD	Department of Defense

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- L -

LCSM . . . . Life Cycle System Management

- M -

MAA . . . . Mission Area Analysis
MACOM . . . Major Army Command
MADP . . . . Mission Area Development Plan
MEDMAP . . . Medical Materiel Acquisition Process
MEDSOM . . . Medical Supply, Optical, and Maintenance
MES . . . . Medical Equipment Set
MOS . . . . Military Occupation Specialty
MLRS . . . . Multiple Launch Rocket System
MRIS . . . . Modernization Resourcing Information Submission

- N -

NCA . . . . National Command Authority
NDI . . . . Non Development Item
NET . . . . New Equipment Training

- O -

OD . . . . Organizational Development
OMB . . . . Office of Management and Budget
ORT . . . . Operational Readiness Test
OTSG . . . . Office of the Surgeon General

- P -

PARR . . . . Program Analysis and Resource Review
PBD . . . . Program Budget Decision
PBG . . . . Program Budget Guidance
PDIP . . . . Program Development Incremental Packages
PDO . . . . Property Disposal Office
PDM . . . . Program Decision Memorandum
PLL . . . . Prescribed Load List
POM . . . . Program Objective Memorandum
PPBES . . . Planning, Programming, Budgeting, and Execution System
PPBS . . . . Planning, Programming, Budgeting System
PRIPROG . . Priority Program
P&D . . . . Production and Deployment

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- Q -

QQPRI . . . Qualitative and Quantitative Personnel
Requirements Information

- R -

RAM . . . . Reliability, Availability, and Maintainability
RDA . . . . Research, Development, and Acquisition
RDTE. . . . Research, Development, Test, and Evaluation

- S -

SA . . . . Secretary of the Army
SACS. . . . Structure and Composition System
SECDEF . . . Secretary of Defense
SME . . . . Subject Matter Expert
SPR . . . . System Program Review

- T -

TAA . . . . Total Army Analysis
TAADS . . . The Army Authorization Document System
TAP . . . . The Army Plan
TDA . . . . Table of Distribution and Allowance
TMC . . . . Troop Medical Clinic
TIWG. . . . Test Integration Work Group
TOE . . . . Table of Organization and Equipment
TRADOC . . . US Army Training and Doctrine Command
TSG . . . . The Surgeon General

- U -

UNITREP . . Unit Status and Identity Report
USAMMA . . . US Army Medical Materiel Agency
USAMRDC. . . US Army Medical research and Development Command

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